

**DRAFT BHUBANESWAR DEVELOPMENT
AUTHORITY (PLANNING & BUILDING
STANDARDS) REGULATIONS, 2008**

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BHUBANESWAR DEVELOPMENT AUTHORITY, BHUBANESWAR

NOTIFICATION

The 27th March 2008

No. 2902—BDA.—The Draft of Bhubaneswar Development Authority (Planning and Building Standards) Regulations, 2008 framed by the Authority, in exercise of the powers conferred by sub-section (1) of Section 124 of the Orissa Development Authorities Act, 1982 (Orissa Act 14 of 1982), read with clauses (viii) to (xviii) of sub-section (2) of the said section is hereby published as required under Section 125 of the said Act for information of all persons likely to be affected thereby and notice is hereby given that the said draft will be taken into consideration on or after the expiry of a period of 15 (fifteen) days from the date of publication of this notification in the *Orissa Gazette*.

Any objection or suggestion which may be received from any person/Group/Firm/Central/State Government and Private Agencies in respect of the said draft before expiry of the period so specified above shall be considered by the Bhubaneswar Development Authority.

Objections or suggestions to the aforesaid Regulations with any request or personal hearing, if any, may be sent in writing to the Secretary, BDA before the above date.

NOTE — The persons making any objections or suggestions to the above draft shall furnish his full name and address.

PART – I

TITLE AND DEFINITIONS

Short title,
Extent and
commencement.

1. (1) These Regulations may be called Bhubaneswar Development Authority (Planning and Building Standards) Regulations, 2008.
- (2) They shall extend to the whole area within the jurisdiction of the Bhubaneswar Development Authority.
- (3) They shall come into force on the date of publication in the *Orissa Gazette*.

Definitions.

2. In these Regulations, unless the context otherwise requires:

- (1) “**Act**” means the Orissa Development Authorities Act, 1982.
- (2) “**Advertising Sign**” means any surface or structure with characters, letters or illustrations applied thereto and displayed in any manner whatsoever outdoors for the purpose of advertising or giving information or to attract the public to any place, person, public performance, article or merchandise, and which surface or structure is attached to, forms part of or is connected with any building, or is fixed to the ground or to any pole, screen, fence or hoarding or displayed in space or in or over any water body included in the jurisdiction of the Authority ;
- (3) “**Agricultural use**” means use of land for the purpose of agriculture, horticulture, sericulture, animal husbandry, poultry farming, plant nursery, piggery, dairy farming, vegetable farming and any activity related to agriculture or milk chilling plant;
- (4) “**Air-Conditioning**” means the process of treating air so as to control simultaneously its temperature, humidity, cleanliness and distribution to meet the requirement of conditioned space;
- (5) “**Air Port Reference Point**” means a designated point which is established in the horizontal plane at or near the geometric center of the landing area ;
- (6) “**Amenity**” means roads, street, open spaces, parks, recreational grounds, play grounds, gardens, water-supply, electric supply, street lighting, sewerage, drainage, public works and other utilities, services and conveniences.
- (7) “**Apartment or flat**” means a dwelling unit in building ;

- (8) **“Apartment building”** means a building having four or more dwelling units ;
- (9) **“Approved”** means approved by the Authority ;
- (10) **“Addition/ Alteration”** means structural change, such as addition to the covered area or height or the removal of part of a building or construction or cutting into or removal of any wall, partition, column, beam, joist, floor or other support or a change to the fixture of equipment of the building ;
- (11) **“Applicant”** means the person who has legal title to a land or building and includes—
- A. an agent or trustee who receives rent on behalf of the owner;
 - B. an agent or trustee who receives rent or is entrusted with or is concerned with any building devoted to religious or charitable purpose;
 - C. a receiver, executor or administrator or a manager appointed by any Court of competent jurisdiction to have the charge of or to exercise the rights of the owner ; and
 - D. a mortgagee in possession ;
- (12) **“Art Commission”** means the Commission constituted under sub-section (1) of Section 88 of the ODA Act, 1982 ;
- (13) **“Authority”** means the Bhubaneswar Development Authority and does not include its employees acting individually. The powers and responsibilities of the Authority under this Regulation can not be delegated, unless specifically provided for in this Regulation, the Act, the Rules or unless notified by the Government;
- (14) **“Balcony”** means a projection including a hand rail or balustrade not more than 1.0 meter high to serve as passage or sit out place ;
- (15) **“Barsati”** means a habitable room, not exceeding 30% of the covered area on the top floor of the building with toilet & kitchen unit built contiguously ;
- (16) **“Basement or cellar”** means lower storey of a building ,below or partly below the ground level ;
- (17) **“Basti Area”** means an area declared as such under a Development Plan and in the absence of such declaration, any area comprising old settlements covering such extent of lands as may be determined by the Authority in consultation with the concerned Local Body ;

- (18) “**Basti Plot**” means a plot having a width ranging between 4.0 m. and 6.3 m., the depth being more than three times the width and located in a basti area;
- (19) “**Builder**” means an applicant, land owner, contractor, holder of power of attorney of the land owner, partnership, trust or company which has responsibility for construction, leasing, selling or disposing otherwise of a building for residential and other purposes and duly registered by the Authority ;

NOTE— The Bhubaneswar Development Authority will be the builder for its own construction.

- (20) “**Building**” means any structure or erection or part of a structure or erection which is intended to be used for residential, commercial, industrial or any other purpose whether in actual use or not, and in particular—
- A. “**Assembly Building**” refers to a building or part of a building where group of people congregate or gather for amusement, recreation, social, religious, patriotic and similar purposes and includes theaters, assembly halls, auditoria, exhibition halls, museum, skating rinks, gymnasium, dance hall, club rooms recreation piers and stadia.
 - B. “**Business Building**” refers to a building or part of a building, which is used for transaction of business, keeping of accounts and records or for similar purposes and includes Bank and Commercial Office and Corporate Offices.
 - C. “**Educational Building**” refers to a building used for school, college or daycare purpose for more than 8 hours per week involving assembly, instructions, education or recreation.
 - D. “**Hazardous Building**” refers to a building or part of a building which is used for the storage, handling, manufacture or processing of highly combustible or explosive materials or products which are liable to burn with extreme rapidity and/or producing poisonous fumes, or the storage, handling, manufacturing or processing of which involves highly corrosive, toxic, obnoxious alkalis, acids or other liquids, gases or chemicals, producing flame, fumes and explosion, poisonous irritant or corrosive gasses and for the storage, handling or processing of any material producing explosive mixture of dust or which result in the division of matter into fine particles subject to spontaneous ignition. This shall include petrol filling stations.
 - E. “**Industrial Building**” refers to a building or part of a building in which products or materials of all kind and properties are fabricated, assembled or processed such as assembly plants, laboratories, power plants, smoke houses, refineries, gas plants, mills, dairies or factories.

- F. **“Institutional Building”** refers to a building or part of a building which is used for purposes such as Research and Training Centre, Public/Semi Public offices, Hospitals, Dispensaries and Health Centres.
 - G. **“Mercantile Building”** refer to a building or part of a building which is used for the purpose of a shop, store, market display and sale of merchandise either in wholesale or retail, or office, storage or services facilities incidental to the sale of merchandise and includes Cinema Hall, Petrol Pump, Hotel, Restaurant, Nursing Home, Lodge-cum-guest house, Dharma Kanta, etc.
 - H. **“Residential Building”** refers to a building in which sleeping accommodation is provided for normal residential purpose with or without cooking or dining or both facilities and includes one or two or multi-family dwelling dormitories, apartment houses, flats and hostels.
 - I. **“Public Utility Building”** means and includes Post Office, Police Station, Fire Station, Hospital, Dispensary, Telephone Exchange, sub-station, water works, Taxi Stands, Bus Terminals, etc.
 - J. **“Storage Building”** refers to a building or part of building used primarily for the storage or sheltering of goods, storehouses, hangers, terminal depot, grain elevators, barn or stables.
 - K. **“Multi Level Car Parking Building”** means a building partly below ground level having two or more basements or above ground level, primarily to be used for parking of cars, scooters or any other type of light motorized vehicles ;
- (21) **“Building Accessory”** means a subordinate building, use of which is incidental to that of a principal building, on the same plot such as garage, coal or fuel shed, peons, chowkidars or domestic servants quarters, etc;
- (22) **“Building Height”** means the vertical distance measured in the case of flat roofs, from the average level of the center line of the adjoining street to the highest point of the building adjacent to the street; and in the case of pitched roofs, up to the point where the external surface of the outer wall intersects the finished surface of the sloping roof and in the case of gables facing the road, the mid-point between the eaves level and the ridges.

Explanation—If the building does not abut on a street, the height shall be measured above the average level of the ground around and contiguous to the building.

- (23) **“Building line”** means the line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend and includes the lines prescribed in any development plan in operation for any area under the jurisdiction of the Authority or specification indicated in any Town Planning or Development Scheme or in these Regulations.
- (24) **“Canopy”** means cantilevered projection at lintel level over any entrance.
- (25) **“Cornice”** means a sloping or horizontal structural overhang usually provided over openings or external walls to provide protection from sun and rain.
- (26) **“Chajja”/“Sun-Shade”** means a sloping or horizontal structural overhang, usually provided for protection from sun and rain or for architectural considerations at lintel level.
- (27) **“Chimney”** means an upright shaft containing and encasing one or more flues provided for the conveyance to the outer air of any product of combustion; resulting from the operation of any heat producing appliance or equipment employing solid, liquid or gaseous fuel;
- (28) **“Combustible materials”** means a material, which burns or adds to a fire when used for combustibility in accordance with good practice;
- (29) **“Conversion”** means the change of occupancy to another occupancy or change in building structure or part thereof resulting in change of space or use requiring additional occupancy certificate.
- (30) **“Corner plot”** means a plot at the junctions of and fronting on two or more intersecting streets. “Corner plot” means a plot facing two streets, the frontage would be on the street having larger width. In cases, where the two streets are of same width, then the larger side of the plot will decide the frontage. In such case, the location of a garage (on a corner plot) if provided, within the open space shall be located diagonally opposite the point intersection.
- (31) **“Courtyard”** means a space permanently open to sky, with or without pergola, enclosed fully or partially by buildings and may be at ground level or any other level within a building;

- (32) **“Covered Area”** means in respect of ground floor, area covered immediately above the plinth level by the building but does not include the open space covered by—
- A. garden, rockery, well and well-structures, rainwater harvesting structures, plant nursery, water-pool (if uncovered), platform round a tree, tank, fountain, bench, chabutara with open top unenclosed on sides by walls, boundary wall, swing, and area covered by chajja without any pillars etc, touching the ground,
 - B. ‘drainage culvert conduit’, catch-pit, gully pit, inspection chamber, gutter and the like, and
 - C. compound wall, gate, slide/ swing door, canopy and areas covered by chajja or similar projections and staircases which are uncovered and open at least on three sides and also open to sky ;
- (33) **“Cul-de-sac”** means such means of access having length up to 150 m. with an additional turning space not less than 81 square meters in area having no dimension less than 9 m.;
- (34) **“Damp-Proof Course”** means course consisting of some appropriate water proofing material provided to prevent penetration of dampness ;
- (35) **“Detached building”** means a building whose walls and roof are independent of any other building with open spaces on all sides;
- (36) **“Development Plan/ Comprehensive Development Plan”** includes any development plan either interim or comprehensive or zonal plan in operation for the area under the jurisdiction of the Authority;
- (37) **“Deviation”** means any construction made in departure from the approved plan by way of alterations or additions, modifications in the total floor area, coverage, floor area ratio (FAR), setbacks, height, parking space, provision of public utilities, etc ;
- (38) **“Drain”** means a line of pipes including all fittings and equipment such as manholes, inspection chamber, traps, gullies and floor traps, used for the drainage of a building or a number of buildings, or yards appurtenant to the buildings within the same cartilage and includes open channels used for conveying surface water;
- (39) **“Drainage”** means the removal of any liquid by a system constructed for purpose;

- (40) **“Dwelling Unit”** means a building used for living purpose and includes a garage, a servant quarter or a guardroom ;
- (41) **“Encroachment”** means an act to enter into the possession or rights either of permanent or temporary nature on a land or built up property of local body or State/Central Government ;
- (42) **“Existing Use”** Use of a building or structure existing authorisedly with the approval of the Authority before the commencement of these Regulations ;
- (43) **“Enclosed stair-case”** means a stair-case, separated by fire resistant walls from the rest of the building ;
- (44) **“Existing Building or use”** means a building, structure or its use as sanctioned/ approved/ regularized by the Competent Authority, existing before the commencement of these Regulations;
- (45) **“Exit”** means a passage, channel or means of egress from any building, storey or floor area to a street or other open space of safety;
- (46) **“External Wall”** means an outer wall of a building even though adjoining to a wall of another building and also means a wall abutting on an interior open space of a building ;
- (47) **“Farm House”** means a plot of land including construction thereon in the area designated for agricultural use by the Authority ;
- (48) **“Farm Shed”** shall include permanent or temporary structures erected in the plot used for farmhouse ;
- (49) **“Fire Alarm System”** means an arrangement of call joints or detectors, sounders and other equipments for the transmission and indication of alarm and sometimes used as signals for testing of circuits and whenever required for the operation of auxiliary services. This device may be work automatically or manually to alert the occupants in the event of fire ;
- (50) **“Fire Lift”** means lift specially designed for use by fire service personnel in the event of fire;
- (51) **“Fire Proof Door”** means a door or shutter fitted to a wall opening ; and constructed and erected with the requirement to check the transmission of heat and fire for a specified period ;
- (52) **“Fire Resisting Material”** means the material, which is normally used for fire resistance ;
- (53) **“Floor”** means the lower surface in a storey on which one normally walks in a building ;

- (54) **“Floor Area Ratio (FAR)”** means the quotient obtained by dividing the total covered area on all floors with the area of the plot x100 ;
- (55) **“Footing”** means the part of a structure, which is in direct contact with the ground and transmitting loads to the ground ;
- (56) **“Foundation”** means that part of a structure, which is in direct contact with and meant for transmitting loads to the ground ;
- (57) **“Gallery”** means an intermediate floor or platform projecting from a wall of an auditorium or a hall providing extra floor area, additional seating accommodation, etc. It shall also include structures provided for seating in stadia ;
- (58) **“Garage-Private”** means a building or a portion thereof designed for parking of privately owned motor vehicles or any other vehicles ;
- (59) **“Garage-Public”** means a building or a portion thereof designed or used for repairing, servicing, hiring, selling or parking of motor driven or any other vehicles ;
- (60) **“Ground Floor”** shall mean storey, which has its floor surface nearest to the ground around the building ;
- (61) **“Group Housing”** means premises comprising of more than one building, each building having four or more dwelling units ;
- (62) **“Habitable room”** means a room having area of not less than 9.0 sq. m., width 2.4 m.(min.), height 2.75 m.(min.) occupied or designed for occupancy by one or more persons for study, living, sleeping, eating, cooking if it is used as a living room, but does not include bathrooms, water closet compartments, laundries, serving and storage pantries, corridors, cellars, attics and spaces that are not used frequently or during extended periods;
- (63) **“Hazardous material”—**
- A. Means radioactive substances;
 - B. Material which is highly combustible or explosive and/or which may produce poisonous fumes explosive emanations, or storage, handling, processing or manufacturing of which may involve highly corrosive, toxic, obnoxious alkalis or acids or other liquids;
 - C. Other liquids or chemicals producing flame, fumes, explosive, poisonous, irritant or corrosive gases or which may produce explosive mixtures of dust or fine particles capable of spontaneous ignition ;

- (64) **“Hazardous and obnoxious industry”** means industry which creates nuisance to the surrounding development in the form of smell, smoke, gas, dust, air pollution, water pollution and other unhygienic conditions ;
- (65) **“Natural hazard prone areas”** means areas likely to have moderate to high intensity earthquake, or cyclonic storm, or significant flood flow or inundation, or landslides/mud flows/avalanches, or one or more of these hazards ;

NOTE— *Moderate to very high damage risk zones of earthquakes are shown in Seismic Zones III, IV and V specified in IS:1893; moderate to very high damage risk zones of cyclones are those areas along the sea coast of India prone to having wind velocities of 39 m/s or more as specified in IS:875(Part 3;) and flood prone areas in river plains (unprotected and protected) are indicated in the Flood Atlas of India prepared by the Central Water Commission, besides, other areas which can be flooded under conditions of heavy intensity rains, inundation in depressions, back flow in drains, inadequate drainage, etc. as identified through local surveys in the development plan of the area and landslide prone areas as identified by State Government/Land surveys.*

- (66) **“Heritage Zone”** means the area as delineated in Comprehensive Development Plan ;
- (67) **“Illuminated Exit Signs”** means a device for indicating the means of escape during normal circumstances and power failure ;
- (68) **“Jhamp”** means a downward vertical or sloping projection hanging below the balcony to provide protection from direct sun or rain ;
- (69) **“Katra/ Chawl”** means a building so constructed as to be suitable for living in separate tenements each consisting a single room, or of two, but not more than two rooms and with common sanitary arrangements ;
- (70) **“Latrine-connected”** means a latrine connected to the municipal sewer system;
- (71) **“Latrine-unconnected”** means a latrine not connected to the municipal sewer system; it may be connected to a septic tank or suitable treatment or disposal system;
- (72) **“Ledge / Tand”** means a shelf-like projection supported in any manner whatsoever, except by means of vertical supports within a room itself but not having projection wider than 1.0 meter and at a minimum clear height of 2.1 meters from the floor level;
- (73) **“Loft”** means an intermediate floor between two floors or a residual space in a pitched roof, above normal floor level with a maximum height of 1.5 meters and which is constructed or adopted for storage purposes;

- (74) “**Licensed Technical Person**” means Architect registered with the Council of Architecture or Civil Engineer/Structural Engineer/Town Planner/Supervisor licensed by the Authority ;
- (75) “**Masonry**” means an assemblage of masonry units properly bonded together with mortar;
- (76) “**Mezzanine Floor**” means an intermediate floor between two floors, above ground level, accessible only from the lower floor;
- (77) “**Multi - Storey or High Rise Building**” means a building whose height is more than 15 meters or more, measured from the average level of the centre line of the street on which the site abuts or more than four floors excluding basement or stilt;
- (78) “**Mumty or Stair Cover**” means a structure with a covering roof over staircase and its landing built to enclose only the stairs for the purpose of providing protection from weather and not used for human habitation ;
- (79) “**Mitigation**” means measures taken in advance of a disaster aimed at minimizing or eliminating its impact on society and on environment including preparedness and prevention ;
- (80) “**Non-Combustible Material**” means a material, which does not burn nor add heat to a fire when tested for combustibility in accordance with good practice ;
- (81) “**Non-Conforming Use of a Building or Land**” means the use of a building or land existing at the time of commencement of these Regulations and which does not conform to the Regulations pertaining to the zone in which it is located ;
- (82) “**Occupancy or Use** ” means the principal occupancy for which a building or a part of a building is used or intended to be used;
- (83) “**Open Space**” means an area forming an integral part of the plot, left open to the sky;
- (84) “**Owner**” means a person, group of persons, a company, trust, Institute, Registered body, State or Central Government and its departments, undertakings and the like in whose name the property stands registered in revenue records ;
- (85) “**Parapet**” means a low wall or railing built along the edge of a roof or a floor having a minimum height of 1.0 m. ;

- (86) **“Parking Space”** means an area enclosed or unenclosed, covered or open, of sufficient size to park vehicles, together with a driveway connecting the parking space with a street or any public area and permitting ingress and egress of the vehicles;
- (87) **“Partition”** means an interior non-load bearing wall, one storey or part of a storey in height ;
- (88) **“Performance Security”** means a security deposit to be deposited with the Authority by the Builder/ Developer of an Apartment Building/ Group Housing/ Commercial Building/Real Estate Development at the time of approval of Plans.

However, no Performance Security is required for a commercial building having a covered area of less than 300 sqm ;
- (89) **“Permit”** means a permission or authorization in writing by the Authority to carry out the work regulated by these Regulations ;
- (90) **“Plantation”** means plantation of plants and trees ;
- (91) **“Plinth”** means the portion of a structure between the surface of the surrounding ground and the surface floor, immediately above the ground;
- (92) **“Plinth Area”** means the built up area measured at the floor level of ground floor;
- (93) **“Porch”** means a covered surface supported on pillar or otherwise for the purpose of pedestrian or vehicular approach to a building ;
- (94) **“Public Utility Service”** means drainage, sewerage, electricity, water supply, solid waste disposal, sanitation, fire services, roads and any other support or infrastructure and the like for which a building has to depend on public bodies, authorities or agencies;
- (95) **“Real Estate Development”** means development undertaken for sale ;
- (96) **“Registered Architect”** means an Architect registered with the Council of Architecture, who is not in arrears of subscription and who has not been debarred by the Authority ;
- (97) **“Registered Builder/ Developer”** means a builder empanelled/ registered with the Authority ;
- (98) **“Road”** means any access viz. highway, street, lane, pathway, alley, or bridge, whether a thoroughfare or not, over which the public have right of passage or access or have passed and had access uninterruptedly for a

specified period and includes all bunds, channels, ditches, storm water drains, culverts, side tracks, traffic islands, road side trees and hedges, retaining walls, fences barriers and railings within the road line ;

- (99) **“Road Width or Width of Road/Street”** means the whole extent of space within the boundaries of a road when applied to a new road/street as laid down in the city survey or development plan or prescribed road lines by any act of law and measured at right angles to the course or intended course of direction of such road ;
- (100) **“Row Housing”** means a row of contiguous houses with only front, rear and interior open spaces ;
- (101) **“Room Height”** means the vertical distance measured from the finished floor level to the finished ceiling ;
- (102) **“Rule”** means the Orissa Development Authorities Rules, 1983 as amended from time to time ;
- (103) **“Schedule”** means a schedule appended to these Regulations ;
- (104) **“Section”** means sections of the Act ;
- (105) **“Semi-Detached Building”** means building detached on three sides (front, rear and side) with open spaces as specified under the Regulations;
- (106) **“Set back”** means the distance between the plinth lines of the building and the boundary of the plot ;
- (107) **“Setback line”** means a line usually parallel to the plot boundaries and laid down in each case by the Authority beyond which nothing can be constructed towards the plot boundaries and shall not apply to slums taken up under an approved programme of the Government subject to the specific sanction of the Government and subject to the conditions that there will not be more than 25 plots in one cluster, and the area of each plot in the cluster shall not exceed 25 sq. m. ;
- (108) **“Settlement”** means a human settlement, whether urban or rural in character. It includes habited villages, towns, townships, cities and the areas notified under the control of the Authority ;
- (109) **“Site”** means a parcel or piece of land enclosed by definite boundaries;
- (110) **“Site with Double Frontage”** means a site having frontage on two streets other than corner plot ;

- (111) **“Service Floor”** means floor in hotel or commercial building above ground floor in case of more than four storeyed buildings ;
- (112) **“Service Lane”** means a lane provided at rear or side of a plot for service purposes;
- (113) **“Service Road”** means a road/ lane provided at the front, rear or side of a plot for service purpose;
- (114) **“Side Depth”** means horizontal distance between the front and rear side boundaries;
- (115) **“Smoke Stop Door”** means a door for preventing or checking the spread of smoke from one area to another;
- (116) **“Stilt floor”** means a floor supported by pillars with all four sides open to be used for parking, switch room, generator room, society room & information room with maximum height of 2.4mtrs.;
- (117) **“Storage Space”** means a space where goods of non-hazardous nature are stored and includes cold storage and banking safe vaults;
- (118) **“Store Room”** means a room used as storage;
- (119) **“Spiral Staircase”** means a staircase forming continuous winding curve round a central point or axis provided in a open space having tread without risers;
- (120) **“Storey”** means the space between the surface of any floor and the surface of the floor next above it, or if there be no floor above it then the space between any floor and the ceiling next above it, but shall not include a mezzanine floor;
- (121) **“Supervisor”** means a person having Diploma in Architectural Assistantship/ Diploma in Civil Engineering/ equivalent qualification;
- (122) **“Tenements”** means room or rooms in the occupation of , or meant for the occupation of one tenement;
- (123) **“To abut”** means to abut on a road so that any portion of the building is on the road boundary;
- (124) **“To erect”** a building means—
 - A. to erect new building on any site whether previously built upon or not;
 - B. to re-erect any building of which portions above the plinth level have been pulled down or destroyed;

- (125) **“Unsafe Building”** means buildings which are structurally and constructionally unsafe, or in-sanitary, or do not provide adequate means of egress, or which constitute fire hazard, or are otherwise dangerous to human life or property, or which in relation to existing use constitute a hazard to safety/health/public welfare by reason of inadequate maintenance, dilapidation or abandonment;
- (126) **“Unauthorized Construction”** means the erection or re-erection, addition or alternation which is not approved or sanctioned by the Authority;
- (127) **“Underground/Overhead Tank”** means an underground/ overhead water tank, constructed or placed to store water;
- (128) **“Verandah”** means space with at least one side open to the outside with the exception of one meter parapet on the upper floors to be provided on the open side;
- (129) **“Ventilation”** means the supply of outside air into a building through window or other openings due to wind out side and convection effects arising from temperature, or vapour pressure differences (or both) between inside and outside of the building ;
- (130) **“Water Closet/W.C.”** means a privy with arrangement for flushing the pan with water but does not include a bath room;
- (131) **“Watercourse”** means a natural channel or an artificial channel formed by draining or diversion of a natural channel meant for carrying storm and wastewater;
- (132) **“Window”** means an opening to the outside other than a door, which provides all or part of the required light or ventilation, or both to an interior space ; and
- (133) **“Zoning Regulations”** means Regulations or Plans governing land use in any development plan or forming part of a development plan in operation.

Words and expressions used in these Regulations, but not defined, shall have the same meaning as respectively assigned to them in the Orissa Development Authorities Act, 1982, the Orissa Development Authorities Rules, 1983 and National Building Code of India, 2005 amended from time to time.

PART - II

ADMINISTRATION

Applicability.

3. Subject to the provisions of the Act, these Regulations shall apply—

- (1) to the planning, design and construction of building in case of erection a building ;
- (2) to all parts of the building whether removed or not , and in case of removal of whole or any part of the building;
- (3) to the remaining part of the building after demolition and work involved in demolition in case of demolition of whole or any part of a building;
- (4) to the whole building whether existing or new building (except only to that part of the building, which is consistent with these Regulations) in case of alteration of a building;
- (5) to all parts of the building affected by the change in case of change of occupancy of a building; and
- (6) to use of any land or building where subdivision of land is undertaken or use of land or building is changed.

Deemed permission.

- 4.** (1) The construction of any building, in respect of which permission has been issued before the coming into force of these Regulations, shall, so far as it is not inconsistent with the provisions of these Regulations regarding provision of public utility services, and construction in heritage zone, continue to be validly made and the said permission shall be deemed to have been issued under the corresponding provisions of these Regulations.
- (2) Where any building has been constructed without an approved plan or with deviation of an approved plan, the provisions of these Regulations shall be insisted upon.

Application.

- 5.** (1) Any person who intends to erect, re-erect or make additions or alterations in any building or demolish any building shall apply to the Authority in Form-I (Part-I). Based on this, the Authority may prescribe separate formats for different categories of buildings and group housing.

(2) Such application shall be accompanied by the following documents:—

A. Four copies of plans either computer plots, plain paper copies or ammonia prints, duly signed by the persons who have prepared them and the owner / applicant, showing—

i. Key plan: A key plan drawn to a scale of not less than 1:10,000 shall be submitted along with the application for development/ building permit showing the boundary and location of the site with respect to neighbourhood landmarks. The minimum dimension of the key plan shall be not less than 75 mm.

ii. Site plan: The site plan with the application for permit shall be drawn to a scale of not less than 1:200 for site up to 1000 sq. m., 1: 500 for a site up to 1 hectare and 1:1000 for site more than 1 hectare and shall show—

- a. the boundaries of the site and of any contiguous land;
- b. the position of the site in relation to neighbouring streets;
- c. the name of the streets in which the building is proposed to be situated, if any;
- d. all existing buildings standing on, over or under the site including service lines;
- e. the position of the building and of all other buildings (if any) which the applicant intends to erect upon his contiguous land referred to in (a) in relation to—
 - (1) the boundaries of the site and in case where the site has been partitioned the boundaries of the portion owned by the applicant and also of the portions owned by others;
 - (2) all adjacent streets, buildings (with No. of storeys and height) and premises within a distance of 15 m. of the site and of the contiguous land (if any) referred to in (a); and
 - (3) if there is no street within a distance of 15 m. of the site, the nearest existing street;
- f. the means of access from the street to the building and to all other buildings (if any) which the applicant intends to erect upon his contiguous land referred to in (a);
- g. space to be left about the building to secure free circulation of air, admission of light and access for scavenging purposes;

- h. the width of the street (if any) in front and of the street (if any) at the side/rear or near the buildings ;
- i. the direction of north point relative to the plan of the building;
- j. any physical features, such as well, drains, etc; and
- k. such other particular as may be specified by the Authority.

iii. Subdivision/Layout plan: In case of development work, the notice shall be accompanied by the subdivision/layout plan which shall be drawn on a scale or not less than 1:500 containing the following :—

- a. scale and north point;
- b. the location of all proposed and existing roads with their existing /proposed/prescribed widths within the land;
- c. dimensions of the plot along with building lines showing the setbacks with dimensions within each plot;
- d. the location of drains, sewers, public facilities and services, and electrical lines, etc.;
- e. table indicating size, area and use of all the plots in the subdivision/layout plan;
- f. statement indicating the total area of the site, area utilized under roads, open spaces for parks, playgrounds, recreation space and development plan reservations, schools, shopping and other public spaces alongwith their percentage with reference to the total area of the site proposed to be subdivided; and
- g. in case of plots which are subdivided in built up areas in addition to the above, the means of access to the subdivision from existing streets.

iv. Building Plan and details: The plans of the buildings and elevations and sections accompanying the notice shall be drawn to a scale of 1:100. The plans and details shall—

- a. include floor plans of all floors together with the covered area clearly indicating the size and spacing of all framing members and sizes of rooms and the position of staircases, ramps and lift wells;

- b. show the use or occupancy of all parts of the buildings;
- c. show exact location of essential services, for example, WC, sink, bath and the like;
- d. Include at least one elevation from the front showing height of building and rooms and also the height of parapet;
- e. Include at least one section through the staircase;
- f. Include the structural arrangements with appropriate sections showing type/arrangements of footings, foundations, basement walls; structural load bearing walls, columns and beams and shear walls; and arrangement/spacing of framing members, floor slabs and roof slabs with the material used for the same;
- g. show all street elevations;
- h. give dimension of the projected portions beyond the permissible building line;
- i. include terrace plan indicating the drainage and slope of the roof; and
- j. give indications of the north point relative to the plan.

v. Building Plan for Multi-storied/special buildings: For all multistoried buildings which are 15 m. or more in height and for special buildings like educational, assembly, institutional, industrial, storage and hazardous and mixed occupancies with any of the aforesaid occupancies having covered area more than 500 sq. m.

The following additional information shall be furnished/indicated in the building plan in addition to the items given in (D) as applicable:—

- a. Access to fire appliances/vehicles with details of vehicular turning circle and clear motorable access way around the buildings;
- b. Size (width) of main and alternative staircases along with balcony approach, corridor, ventilated lobby approach;
- c. Location and details of lift enclosures;
- d. Location and size of fire lift;
- e. Smoke stop lobby/door, where provided ;

- f. Refuse chutes, refuse chamber, service duct, etc. ;
- g. Vehicular parking space;
- h. Refuse area, if any;
- i. Details of building services, Air-conditioning system with position of fire dampers, mechanical ventilation system, electrical services, boilers, gas pipes, etc. ;
- j. Detail of exits including provision of ramps, etc. for hospitals and special risk buildings/uses ;
- k. Location of generator, transformer and switch gear room;
- l. Smoke exhauster system, if any;
- m. Details of fire alarm system network;
- n. Location of centralized control, connecting all fire alarm systems built-in–fire protection arrangements and public address system, etc. ;
- o. Location and dimension of static water storage tank and pump room along with fire service inlets for mobile pump and water storage tank;
- p. Location and details of fixed fire protection installations, such as sprinklers, wet risers, hose-reels, drenchers, etc.; and
- q. Location and details of first-aid fire fighting equipments/ installations.

vi. Services plans: The services plan shall include all details of building and plumbing services, and also plans, elevations and sections of private water supply, sewage disposal system and rain water harvesting system.

vii. Specifications: Specifications, both general and detailed, giving type and grade of materials to be used duly signed by the registered architect, engineer, structural engineer shall accompany the notice.

- (3) In case the applicant is a trust, group of persons, partnership or a company, a registered agreement between the holder of the right, title and interest and the applicant, valid under the Transfer of Properties Act, 1982 and copies of the Agreement/ Article of Association/ Memorandum/ Bye-laws.

- (4) No Objection Certificate from the Orissa State Housing Board / Bhubaneswar Development Authority for the additional constructions, in case the house is delivered by the Board / Authority.
- (5) Necessary environmental clearance wherever applicable.
- (6) For all buildings with a height of 15.0 meters and above, NOC from Fire Service shall be submitted.
- (7) NOC from Airport Authority of India shall be furnished wherever applicable.
- (8) Structural stability certificate in the prescribed Form-VII signed by the engineer /structural engineer and the owner jointly.
- (9) Supervision certificate in Form-I (Part-II) furnished by the registered architect/ engineer/structural engineer/ supervisor/ town planner undertaking the supervision.
- (10) Plans shall be shown as specified below. Where items of work are not identified, the coloring notation used shall be indexed.

TABLE-1
COLOURING NOTATION OF THE PLAN

Sl. No.	Item	Computer Plots / plain paper copies/ ammonia prints
1	2	3
1	Plot lines	Thick Block
2	Existing Street	Green
3	Permissible building line	Thick Dotted Black
4	Existing work (Outline)	Black
5	Work Proposed to be demolished	Yellow Hatched
6	Proposed— (a) Additions and Alterations (b) Entirely New work	Red filled in Not to be colored
7	Drainage	Red Dotted
8	Water Supply	Black Dotted Thin

Fees.

6. The Authority shall levy the following fees:—

- (1) Every application for permission for building operation or development shall be accompanied by a scrutiny fee as specified in clause 18 of ODA Rules, 1983.
- (2) In the event of approval, the applicant shall deposit a sanction fee as decided by the Authority from time to time.
- (3) Fees towards premium FAR as decided by the Authority from time to time.
- (4) Fees for retention of structures for temporary period as decided by the Authority from time to time.
- (5) Fees for change of occupancy as decided by the Authority from time to time
- (6) Fees for change of land use as decided by the Authority from time to time.

Security deposit.

7. (1) The applicant shall deposit a refundable non-earning security deposit at the rate of Rs.100 per sq. m. of floor area for the following categories of buildings, namely:—

A. Group housing / apartment buildings.

B. Commercial buildings having 300 Sqm. or more of floor area.

- (2) The security deposits shall be refunded within 60 days from the date on which completion certificate is produced. If the construction / development is not as per approved plan, this deposit shall be forfeited and separate action will be initiated against the builder / developer as per the provisions of the Act.
- (3) The security deposit will be refunded with 2% interest if the building is constructed / development is carried out as per the approved plan / lay out.

Plans.

8. (1) All the plans shall be prepared and duly signed by a registered technical person (viz., Architect, Engineer, Structural Engineer, Town Planner, Supervisor) and Builder who shall indicate their names, addresses, registration numbers on the body of the plan and in all other relevant documents. The plans shall also be signed by the concerned owner of the land.

- (2) The technical personnel and builder as specified in sub-clause (1) above shall have to be registered with the Authority. Their qualifications and competence shall be as per Schedule-1.
- (3) No plans for construction of apartment building, group housing and commercial building shall be entertained unless the builder is registered

by the Authority in accordance with the competence as specified in the Schedule-1. However for plots less than 500 sq.mtr. of plot area registration of builder is not mandatory.

- (4) When it comes to the notice of the Planning Member, Engineer Member, any Member of the Authority, or any other person that a plan signed by technical personnel or builder referred to under sub-clause (1), is in violation of the norms of this Regulation he shall bring this to the notice of the Authority.
- (5) The Authority shall issue a notice asking for a show cause within fifteen days as to why such technical personnel or builder shall not be disqualified/ blacklisted. After receipt of the show cause, if any, the matter shall be placed before the Authority for a decision on such disqualification/ blacklisting. The decision of the Authority on disqualification/blacklisting shall be published.
- (6) An appeal against an order under sub-clause (5) above shall lie under Section 103 of the Act.

Permission.

9. (1) No permission shall be required for the works specified in Clause 12.4.1, Part-2 of N.B.C.-2005 and Section 15 of O.D.A. Act, 1982.
- (2) All clarifications with respect to deficiency in the plan, documents will be sought for from the applicant within reasonable time.
- (3) Once the plan has been scrutinized and objections have been pointed out, the applicant shall modify the plan to comply with the objections raised and resubmit it. The Authority shall scrutinize the resubmitted plan and if there will be further objections, the plan shall be rejected.
- (4) The Authority shall communicate either approval in Form-II or refusal in Form-IX within 60 days from date of receipt of application under clause 5.
- (5) If the Authority does not communicate its decision either granting or refusing permission to the applicant within 60 days from the date of receipt of the application by the Authority, the applicant shall draw the attention of the Vice-Chairman of the Authority with regard to his application, by registered post in Form-III. The Planning Member shall within the fifteen days from the date of receipt of notice in Form-III place the details of the case before the Vice-Chairman.
- (6) If, within a further period of one month from the date of receipt of the application drawing such attention as mentioned in sub-regulation (5) above, the Authority does not communicate its decision, either granting or refusing permission, such permission shall be deemed to have been granted to the applicant on the date following the date of expiry of the three months period.

- (7) For Stilt +3 storied and above buildings the Authority will accord conditional approval and direct the builder to develop the sewerage, drainage and road infrastructure as per the specification of the Local Authority. Only when the Local Authority gives certificate that the owner/builder has developed infrastructure as per their specifications, clearance for commencement of building construction shall be given.
- (8) A residential building may be constructed by the owner of the land without prior approval of the plan by the Authority if the following conditions are satisfied:—
- A. If the layout has been approved by the Authority under Section 16 of the Act or the land has been allotted by the Authority/General Administration Department of the Government,
 - B. The road, drainage, sewerage and other infrastructure have been developed as per the approved layout,
 - C. The plot size is not more than 300 square meters,
 - D. The coverage is not more than 60 per cent,
 - E. The height is not more than 10 meters,
 - F. No basement/stilt is to be constructed,
 - G. The plan has been approved by a Registered Architect / Engineer empanelled with the Authority as defined under clause 88 above, and;
 - H. An application in plain paper is submitted to the Authority by Registered post with a copy of the plan, and the Record of Rights, 60 days prior to commencement of construction;
 - I. All other conditions of the Regulations.

Note: —

- (a) If the Planning Member does not raise any objection within sixty days, permission shall be deemed to have been granted under Section 16 of the Act.*
- (b) The owner shall have to submit completion certificate as required under Section 20 of the Act.*
- (c) The owner and the builder shall remain responsible for any violation of the norms prescribed under the Regulations. Nothing in this provision will enable the owner and the builder to violate any of the other provisions of the Regulations.*
- (d) Detail guidelines in this regard shall be framed by the Authority from time to time.*

- Maintenance of Register. **10.** A register in Form-IV containing the necessary particulars including information as to the manner in which applications for permission have been dealt with by the Authority shall be maintained.
- Duration of Permission. **11.** Every permission granted under these Regulations shall remain valid up to three years. However the permission shall have to be revalidated before the expiry of the above period on payment of such fee as may be prescribed under rules and such revalidation shall be valid for one year.
- Construction not according to plan. **12.** (1) If the Authority finds at any stage that the construction is not being carried on according to the sanctioned plan or is in violation of any of the provisions of these Regulations, it shall notify the owner and no further construction shall be allowed until necessary corrections in the plan are made and the corrected plan is approved.
- (2) If the owner fails to comply with the requirements at any stage of construction, the Authority may cancel the building permission issued and shall cause notice of such cancellation to be pasted upon the said construction. If the owner is not traceable at the address given in the notice, pasting of such notice shall be considered as sufficient notification of cancellation to the owner thereof. No further work shall be undertaken or permitted upon such construction until a valid building permission is issued thereafter.
- (3) The notification under sub-Regulation (2) shall also be published in as public notice.
- (4) The Authority will also be at liberty to forfeit whole or part of the performance security obtained from the builder/ developer during sanction of the plan.
- (5) The above-mentioned procedure shall also be followed in case of deviation of the layout.
- (6) An appeal against an order under sub-clauses 8 (2) & (4) above shall lie under Section 103 of the Act.
- Information at the site of construction. **13.** (1) Whereas tests of any material are made to ensure conformity of the requirements of these Regulations, records of the tests data shall be kept available for inspection during the construction of building and for such period thereafter as required by the Authority.
- (2) The persons to whom a permit is issued during construction shall keep pasted in a conspicuous place on the property in respect of which the permit was issued;
- A. a copy of the building permit; and
- B. a copy of approved drawings and specifications

- Inspection **14. (1)** Generally all construction or work for which a permit is required shall be subject to inspection by the Authority.
- (2) Inspection, where required, shall be made within seven days following the receipt of notification in Form-V or Form-VIII, after which period the owner will be free to go ahead with the construction according to the approved plan. At the first inspection, the Authority shall determine to the best of its ability that the building construction has been taken up in accordance with approved site plans.
- Completion of construction. **15. (1)** The Authority shall permit an empanelled Architect/ Engineer to certify completion of building and issue of occupancy certificate for residential buildings designed by self or otherwise on a plot size up to 300 Sq.Mtrs. The responsibility of compliance with respect to provisions of these Regulations shall rest with registered architect/engineer. However, the plans shall be required to be submitted to the Authority for information and record.
- (2) The owner/concerned empanelled architect/engineer/structural engineer will serve a notice of completion certificate in Form-VI (Part I and Part II) to the Authority that the building has been completed in all respects as per the approved plan. The deviations shall also be brought to the notice of the Authority (with relevant documents). The team of building officials shall then visit the site within 21 days and occupancy certificate shall be given in one instance.
- Certificate for occupancy. **16. (1)** The Planning Member with the approval of the Vice-Chairman shall issue a certificate of fitness for occupancy, for part of a building during its construction or whole of the building after construction in Form-X.
- (2) Such certificate shall be issued only after all utility services for the entire building are physically provided.
- (3) The occupancy certificate should also state the use/type of occupancy of the building. However, the applicant can apply for change of use/occupancy permitted within the purview of the Development Plan/ Zonal Plan/ Zoning Regulations, where so required.
- (4) In case of multi-storied building and other special building like educational, assembly, institutional, industrial, storage and hazardous and mixed occupancies with covered area more than 500 Sq.Mtr., after completion

of the building and obtaining the occupancy certificate, periodic inspection shall be made by the Fire Authority to ensure the fire safety of the building and compliance with the provision of fire and life safety requirements ('Fire and Life safety', Part-4 of NBC). Period occupancy renewal certificate shall be made available by the Authority/Fire Authority which shall also include safe keep of fire fighting installations and equipment for such building.

- (5) All occupied buildings and buildings covered under sub-clause(4) above shall also be subject to periodic physical inspection by a team of multi-disciplinary professionals of the Authority. This work may be outsourced by the Authority as may be deemed necessary. The team shall ensure the compliance of bye-laws, natural lighting, ventilation, etc, besides structural and electrical safety. After checking, the team shall be required to give the certificate for above aspects. If any shortcomings/deficiencies or violation are noticed during inspection, the Authority shall ensure the compliance of the same within a specified time frame of six months. If not complied with, the building shall be declared unsafe. The period of inspection shall be usually three to five years but in any case not more than five years.
- (6) An appeal against the decision of the Authority shall lie under Section 18/ 103 of the Act.

Art
Commission.

- 17. (1)** Where the building plan accompanying the application seeking permission, requires the clearance of the Art Commission, Orissa, constituted under section 88, the Authority shall grant the permission only after the clearance is given by the said Commission. In all other cases, Architectural Control shall be regulated according to the provisions of these Regulations.
- (2) The Authority, on the recommendation of the Art Commission, may issue public notices from time to time prescribing the architectural norms in different zones.

Construction
near
protected
monuments.

- 18. (1)** No construction or reconstruction of any building, within a radius of 100 meters, or such other higher distance from any archaeological site, as may be decided by the Archaeological Survey of India and Orissa State Archaeology Department from time to time from the outer boundary of a declared protected monument shall be permitted.
- (2) No construction above 1st floor and above 7 (seven) metres shall be allowed beyond a radius of 100 metres and within a radius of 300 metres of such monuments.
- (3) The construction or reconstruction of any building under sub-regulation (2) shall not be above 7 (Seven) metres of total height.

- (4) Height more than 7 metres may be allowed on production of clearance from A.S.I./State Archaeology Department as the case may be.
- (5) If a building or premises, not covered under The Ancient Monument Preservation Act, 1904, or The Ancient Monuments and Archaeological Sites and Remains Act, 1958 in the opinion of the Authority, is of historical or architectural interest, and is in danger of being demolished or altered or likely to be affected in its character by a development, the Authority shall not grant permission for construction over any land situated near the said building or premises. The matter shall be referred to the Art Commission, whose decision shall be final.
- (6) These provisions shall apply *mutatis mutandis* in respect of Archaeological sites notified by the Art Commission.
- (7) An appeal against the decision under sub-clause (5) shall lie under Section 18 of the Act.

Construction
near important
buildings.

- 19.** No building exceeding 10 meters height shall be permitted within 200 meters radius from the boundary of the Governor's House, Orissa State Secretariat, Orissa State Legislative Assembly, Official Residence of Chief Minister and such other buildings as may be decided by the Authority from time to time.

Unsafe
building.

- 20.** (1) All unsafe buildings shall be considered to constitute danger to public safety and shall be restored by repairs or demolished or dealt with otherwise as directed by the Authority.
- (2) The Authority shall examine or cause to be examined, every building reported to be unsafe or damaged and shall make a written record of such examination.
- (3) Whenever the Authority finds any building or portion thereof to be unsafe, it shall, in accordance with established procedure for legal notice, give to the owner or occupier of such building written notices stating the defects thereof. This notice shall require the owner or the occupier within a stated time either to complete specified repairs or improvements or to demolish and remove the building or portion thereof.
- (4) The Authority may direct in writing that the building which in its opinion is dangerous, or has no provision for exit in the event of fire, shall be vacated immediately or within the period specified for the purpose; provided that the Authority concerned shall keep the record of the reasons for such action.

- (5) If any person does not comply with the orders of vacating a building, the Authority may direct the police to remove the person from the building and the police shall comply with the orders.
- (6) In case the owner or occupier fails, neglects or refuses to comply with the notice to repair or to demolish the said building or portion thereof, the Authority shall cause the danger to be removed whether by demolition or repair of the building or portion thereof or otherwise.
- (7) In case of emergency, which in the opinion of the Authority involves imminent danger to human life or health, the decision of the Authority shall be final. The Authority shall forthwith or with such notice as may be possible promptly cause such building or portion thereof to be rendered safe by retrofitting/strengthening to the degree of safety or removed. For this purpose, the Authority may at once enter such structure or land on which it stands, or abutting land or structure, with such assistance and at such cost as may be deemed necessary. The Authority may also get the adjacent structures vacated and protect the public by appropriate fencing or such other means as may be necessary.
- (8) Costs incurred under (6) & (7) shall be charged to the owner of the premises involved. Such cost shall be charged on the premises in respect of which or for the benefit of which the same have been incurred and shall be recoverable as provided under law.

Demolition of building.

- 21.** (1) Before a building is demolished, the owner shall notify all utilities having service connections within the building, such as water electricity, gas, sewer and other connections. A permit to demolish a building shall not be issued until a release is obtained from the utilities departments stating that their respective service connections and appurtenant equipment, such as meters and regulators have been removed or sealed and plugged in a safe manner.
- (2) The owner shall take all precautionary measures to avoid noise and dust pollution and shall not create any inconvenience to the neighbouring plot owners.
- (3) In case of semi-detached building, no objection certificate from the neighbours shall be obtained.

Responsibility and duty of the owner.

- 22.** (1) Neither granting of the permit nor the approval of the drawing and specifications, nor inspections made by the Authority during erection of the building shall in any way relieve the owner of such building from full responsibility for carrying out the work in accordance with the requirements of NBC 2005 and these Regulations.

- (2) Every owner/applicant shall,—

- A. Permit the Authority to enter the building or premises, for which the permission has been granted at any reasonable time for purpose of enforcing the Regulations,
- B. Obtain, where applicable, from the competent Authority permissions/ clearance required in connection with the proposed work,
- C. Give written notice to the Authority before commencement of work on building site in Form-V, periodic progress report in Form-VIII, notice of completion in Form-VI and notice in case of termination of services of Technical persons engaged by him and
- D. Obtain an Occupancy Certificate from the Authority prior to occupation of building in full or part.

Responsibility
of Authority.

23. (1) Approval of plans and acceptance of any statement or document pertaining to such plan shall not exempt the owner or person or persons under whose supervision the building is constructed from their responsibilities imposed under these Regulations, or under any other law for the time being in force.

(2) Approval of the plan would mean granting of permission to construct under these Regulations only and shall not mean among other things:—

- A. the title over the land or building ;
- B. easement rights;
- C. variation in area from recorded area of a plot or a building;
- D. structural stability; and
- E. workmanship and soundness of materials used in the construction of the buildings
- F. quality of building services and amenities in the construction of the building,
- G. the site/ area liable to flooding as a result of not taking proper drainage arrangement as per the natural lay of the land, etc.
- H. other requirements or licences or clearances required for the site / premises or activity under various other laws.

(3) The approval or permission shall not bind or render the Authority liable in any way with regard to the matter specified in clauses (A) to (H).

PART - III

ZONING REGULATIONS

Zoning

- 24.** (1) In the Development Plan area, various use zones *viz*, residential, commercial, industrial, administrative, institutional, open space uses, transport and communication, green belt and natural drainage channel and water bodies having their zonal boundaries as indicated in the development plan shall be regulated as per the Table under Regulation 25. Except as otherwise provided no structure or land hereinafter shall be used and no structure shall be erected, re-erected or altered unless its use is in conformity with the Regulations.
- (2) All places of worship, temples, churches, mosques etc. and burial and cremation ground as existing on Oct. 8, 2001 shall be exempted from being treated as non-conforming uses, provided that continuance of such uses are not detrimental to the area as decided by the Authority from time to time.
- (3) All non-conforming uses of land and buildings shall be discontinued and the modified uses shall be made to conform with the land use of the development plan in force within six months of the Regulations coming in force.

Different
use of
Land.

- 25.** (1) Permission for different uses shall be accorded outright for principal use earmarked in the different zones described in column (2) of the table No. 3.
- (2) Permission for different uses described in column (3) shall be permitted on special consideration on the recommendation of Development Plan and Building Permission (DP and BP) Committee and reasons for such consideration shall be recorded in writing.
- (3) The purposes specified in column (4) of the said table shall not be permitted in the areas reserved for particular uses.
- (4) Residential buildings may also be permitted in the open space use zone, if the following conditions are satisfied along with other conditions of these Regulations.—
- A. the land is a stitiban land and is not a leasehold land;
 - B. the coverage is not more than 40%;
 - C. the height is not more than 7.0 (seven) meters; and at least 20 per cent of land is used for plantation;
- (5) Mixed land use may be permitted in a particular zone on the recommendation of DP and BP Committee. However, the main use shall cover not less than 2/3rd of the total floor area and the ancillary use shall not exceed 1/3rd of the total area.

TABLE-2: LAND USES PERMITTED/PROHIBITED IN DIFFERENT USE ZONES

Use Zone	Use permitted	Use permitted on special consideration	Use prohibited
(1)	(2)	(3)	(4)
1. Residential Use Zone.	1. Residential, Hostel, Boarding Houses. 2. Schools 3. Offices/Clinics belonging to professionals not exceeding one floor. 4. Social, cultural and neighbourhood, recreational institutions with adequate parking facilities 5. Public utilities and public buildings 6. Nursery and green houses 7. Household occupation if the area for such use does not exceed one floor and there shall be no public display of the goods. 8. Banks and other financial institutions not exceeding one floor. 9. Bus stop, Taxi stand 10. Services for households (Saloon, parlors, bakery, sweet shop, dry cleaning, internet kiosk, etc) not part of a residential building	1. Places of worship 2. Convenience shopping 3. Government and Semi-Government offices, 4. Colleges and Research Institutions 5. 20-bed hospitals not treating contagious diseases and mental patients, if setback and coverage of plots are such as not to constitute nuisance to the residential area. 6. Colleges and Research Institutions, if the building is located at a distance of not less than 8 meters from the boundary of the plot 7. Filling Stations 8. Places of Entertainment 9. IT, IT enabled services 10. Tourism related services.	1. All uses not specifically permitted
2.(a) Commercial Use Zone.	1. Retail business, mercantile. 2. Business and Professional Offices 3. Services. 4. Restaurants, Hotels 5. Boarding houses, social and welfare institutions 6. Clinics. 7. Public utilities 8. Parking lots. 9. Meat, fish, vegetable & fruit markets. 10. Wholesale & retail shops.	1. Place of Entertainment and Recreational uses. 2. Place of Worship 3. Service garage provided they do not directly abut the main road. 4. Printing Presses employing not more than 10 persons. 5. Residence on floors other than ground floor. 6. . .	1. Polluting industries. 2. All uses not specifically permitted in the columns (2) and (3) 3. Large scale storage of hazardous materials expecting in area, specifically earmarked for the purpose.

(1)	(2)	(3)	(4)
	11. Banks and Financial services. 12. Bus stop, Taxi stand 13. Parking spaces 14. Filling and Service stations 15. IT and IT enabled services. 16. Government and Semi-Government offices.	7. 20-bed Hospitals not treating contagious diseases and mental patients 8. Wholesale storage yards. 9. Weighbridge	
(d) Wholesale Ware housing and Storage.	1. Wholesale and retail business. 2. Wholesale and Storage buildings 3. Commercial and Business offices 4. Restaurants 5. Public utilities 6. Railway and road freight station 7. Weighbridge 8. Banks and Financial services 9. Bus stop 10. Parking space 11. Filling and Service stations on roads of 12 meter or more ROW 12. Government and semi Government offices. 13. Convention centre	1. Truck terminal and parking 2. Freight terminal 3. Junk-yards 4. Service garage	1. Polluting Industries 2. All uses not specifically permitted in columns (2) and (3) 3. Large scale storage of hazardous and other inflammable materials excepting in areas, specifically earmarked for the purpose.
3. Industrial use zone, light manufacturing industry, service industry and medium industry.	1. IT 2. ITES 3. Financial services 4. Textiles and apparels 5. Food Processing Industries 6. Agro Processing Industries 7. Common facility centers 8. Tool rooms 9. Industrial Research Institutions 10. Non-polluting Industries 11. Light engineering 12. Auto components 13. Electrical and electronic goods.	1. Technical Education Institutions 2. Government and Semi-Government buildings. 3. Hotels 4. Other industries and facilities as suggested by the Industries Department of Government in consultation with Orissa Pollution Control Board and the Authority.	1. Polluting industries 2. General Residences 3. General business unless incidental to and on the same site with industry. 4. Any manufacturing establishment detrimental by way of nuisance or hazard 5. All uses not specifically permitted in columns (2) & (3)

(1)	(2)	(3)	(4)
	14. Pharmaceuticals 15. Beverages 16. Breweries 17. Small Scale Industries 18. SEZs notified by Government of India 19. Activities associated with film production 20. Computer hardware 21. Machine tool industry 22. Convention centres 23. Exhibition stalls 24. Transport terminals 25. Hospitals to cater to the industrial workers 26. Recreational facilities for industrial workers 27. Services for industrial workers		6. Industries not permitted by Orissa Pollution Control Board
4. Administrative Use Zone.	1. Local, State and Central Govt. offices 2. Research Institutions, Social and Cultural Institutions 3. Public utility buildings. 4. Uses incidental to Govt. offices. 5. Local Municipal offices 6. Hotels 7. Shopping Complex 8. Bus and Railway Passenger Terminals 9. Financial Services, ITES	1. Residential incidental to main use. 2. IT Services 3. Hostels, transit accommodation.	All uses not specifically permitted in columns (2) and (3)
5. Institutional and Utility Use Zone.	1. Educational and Medical Institutions, Hospitals, Research Institutions 2. Hotels/Hostels 3. Social and Cultural Institutions 4. Monuments and Religious Institutions 5. Local Municipal and community facilities, public utility buildings 6. IT, ITES, Financial services 7. Bus stop, Taxi stand	1. Residential incidental to main use. 2. Entertainment and Recreational Complexes	All uses not specifically permitted in columns (2) and (3)

(1)	(2)	(3)	(4)
	8. Multi level Car parking 9. Convention centre 10. Banking and financial services 11. Tele-communication		
6. Open Space Use Zone.	1. All recreational uses including parks, playgrounds, stadium 2. Bus and Railway passenger terminals and parking area.	1. Public utility and Municipal facilities 2. Shops incidental to recreation not exceeding three per cent of the area.	1. All uses not specifically permitted in columns (2) and (3).
7. Transportation Use Zone.	1. Bus bays, Auto stand, Bus shelter, information kiosk 2. Parking areas 3. Multi level Car parking 4. Filling Stations, 5. Transport offices 6. Workshops and garages 7. Automobile spares and services Godowns 8. Loading and unloading platforms (with/without cold storage facility), weighbridges 9. Warehouses, Storage Depots 10. Bus and Truck terminals 11. Railway stations yard, depots, 12. Airport 13. All ancillary (complimentary) uses for above categories (subject to decision of the authority).	1. Tourism related projects 2. Way side shops and Restaurants	All uses not specifically permitted in column (2) and (3)
8.Green Belt Zone	1. Agriculture and Horticulture, 2. Diary and Poultry farming, ,Milk chilling centre 3. Farm houses 4. Burial and cremation grounds. 5. Solid waste management sites 6. Construction of building by Government/	1. Houses incidental to this use. Place of worship, Dharmasala, Lodging, Rest shed etc 2. Educational and Research Institutions 3. Libraries and Cultural buildings	

(1)	(2)	(3)	(4)
	<p>Development Authorities beyond the existing developed basti area.</p> <p>7. Building construction over plots covered under town planning scheme and conforming uses.</p>	<p>4. Parks and other recreational uses.</p> <p>5. Agro serving, agro processing, agri business.</p> <p>6. Wayside shops and Restaurant,</p> <p>7. Ice factory, cold storage,</p> <p>8. Godowns and ware-houses,</p> <p>9. Hospital for infectious and contagious diseases, mental hospital after clearance of the Authority</p> <p>10. Petrol pump, garages and workshops,</p> <p>11. Studio</p> <p>12. Activities related to tourism.</p> <p>13. Green buildings</p> <p>14. Normal expansion of land uses only in the existing homestead land.</p>	
9. Natural Drainage Channel Zone.	Agriculture	Horticulture Recreation Water sports	No construction of any kind
10. Flood prone area.	Agriculture Horticulture		No construction of any kind

PART – IV

GENERAL

Restriction on permission. **26.(1)** Without prejudice to any other stipulation in these Regulations, no permission to construct a building on a site shall be granted:—

- A. in areas of natural waterways or drains, as detailed in the Development Plan, and the drainage plan prepared by WAPCOS, as modified from time to time;
- B. if the orientation of such building is not in harmony with the surroundings, as may be decided by the Art Commission;
- C. if the use to which the site is proposed to be put does not conform to the use earmarked in the Development Plan;
- D. if the building is to be constructed over or under a municipal drain, sewerage line, electrical line, water main, any other government or public land, or public utility services;
- E. if the foundation of the external wall along a street is located at a distance less than 0.5 meters from the edge of the street or road margin including the drain;
- F. as Bhubaneswar is located in Seismic Zone III, if all Structural Plans are not prepared taking this into account.

Distance from Electric lines. **27. (1)** As provided in clause-6.4 of NBC 2005, no verandah, balcony or the like shall be allowed to be erected or re-erected or any additions or alterations made to a building within the distances quoted below in accordance with the current Indian Electricity Rules as amended from time to time between the building and any overhead electric supply line;

TABLE – 3: MINIMUM DISTANCE FROM THE ELECTRIC LINE

	Vertical distance in meters	Horizontal distance in meters
Low and medium voltage lines and service lines.	2.5	1.2
High voltage lines up to and including 11,000 Volt.	3.7	1.2
High voltage lines above 11,000 volt and up to and including 33,000 Volt.	3.7	2.0
Extra high voltage line beyond 33,000 Volt.	3.7 (Plus 0.3 meters for every additional 33,000 volts or part thereof)	2.0 (Plus 0.3 meters for every additional 33,000 volts or part thereof)

- Plantation **28.** (1) In every building area, at least 10% of the land shall be utilized for plantation, but in case of Multi-storeyed buildings/ Group Housing / Apartment Building/ Industrial/ Assembly/Educational/ Institutional buildings, at least 20% of the land shall be used for plantation. The plantation shall be completed by the time; the construction of the building is completed.
- Means of access. **29.** (1) Every building/ plot shall abut on a public/ private means of access like streets /roads of duly formed of width as specified in clause 4, Part-3 of N.B.C., 2005.
- (2) In no case, development of plots shall be permitted unless it is accessible by a public street of width not less than 6 meters.
- (3) In case of a private road, which gives access to one or more buildings, the owner of the said private road shall develop the road and storm water drain as required by the Local Authority, and transfer the same by way of gift to the Local Authority for its maintenance before sanction of building plan.
- Minimum size of plot. **30.** The minimum size of plots for different categories of building are given below—

TABLE – 4: CATEGORY WISE SIZE OF PLOTS

Category	Min. road widthin (m)	Min. size of plot in Sq. m.
Kalyan Mandaps	18	1000
Cinema, game centres, Multiplex, convention centres.	18	2000
Social clubs and amenities	12	1000
Multi-storey car parking	12	1000
Office buildings	12	300
Primary/Upper Primary School	12	2000
High School , Residential School	12	6000
+2 College / Junior College	12	4000
Degree College	18	6000
Technical Educational Institution	18	10000
Petrol pumps / Filling stations	18	500
Restaurant	12	500
LPG storages	12	500
Places of congregation	12	500
Public libraries	12	300
Conference Hall	15	1000
Community Hall	12	500
Nursing Homes/Polyclinics	12	300
Hotel	18	2000
R. & D. Lab.	15	1500

NOTE— In exceptional cases the Authority may consider revising the minimum size of plot on the recommendations of the Development Plan & Building Permission (D.P.&B.P.) Committee.

Minimum setbacks & Height for non-high rise buildings.

31.(1) The minimum setbacks and height of buildings permissible in a given size/ plot for residential and commercial building shall be as follows :—

TABLE 5— PLOT SIZEWISE PERMISSIBLE SETBACKS AND HEIGHT OF BUILDINGS

Plot size (in Sq. Mts)	Parking provision	Maximum height of building permissible (in Mts)	Front setback (in Mts.) Abutting road width					Minimum setbacks other sides (in Mts.)	
			less than 9 mts	9 mts and below 12 mts.	12 mts and less than 18 mts.	18 mts and less than 30 mts.	above 30 mts	rear side	other side
1	2	3	4(a)	4(b)	4(c)	4(d)	4(e)	5	6
Lass than 100.	..	7	1.5	2.0	2.5	3.0	4.5	1.0	..
100 & up to 200.	..	10						1.5	1.5
Above 200 & up to 300.	..	10						2.0	1.5
Above 300 & up to 400.	..	12	1.5	2.0	3.0	3.0	4.5	2.5	1.5
Above 400 & up to 500.	Stilt floor allowed.	12						3	3
Above 500 & up to 750.	Either stilt or single cellar.	12						4	4
Above 750	Stilt+1 cellar allowed.	15						5	5

(2) In case of group housing, the minimum distance between two buildings will not be less than 1/3rd of the height of the taller building. However the minimum width of the internal road will be 6 m.

(3) The setbacks/open spaces for other occupancies shall be as below :—

A. Educational buildings—Except for nursery schools, the open spaces around the building shall not be less than 6 m.

- B. Institutional buildings—The open spaces around the building shall not be less than 6 m.
- C. Assembly Buildings—The open space at front shall be not less than 12 m. and the other open spaces around the building shall not be less than 6 m.
- D. Business, mercantile and storage buildings—In case of plots with more than 500 sq.mtr. area, the open spaces around the building shall be not less than 4.5 m.
- E. Industrial Buildings—The open spaces around the building shall be not less than 4.5 m for heights up to 15 m.
- F. Hazardous occupancies - the open spaces around the building shall not be less than 6 m.

- (4) In case of multi-storeyed building, the open spaces around the building shall be 1/3rd (one third) of the height of the building.

Floor Area ratio. **32.** (1) The floor area ratio (F.A.R.) for residential, commercial, corporate, I.T./ I.T.E.S. etc. buildings shall be decided on the basis of the road width on which the plot/site abuts.

TABLE 6— FAR AS PER ROAD WIDTH.

Road width in m.	F.A.R.
Up to 6	100
6 or more and less than 9	150
9 or more and less than 12	175
12 or more and less than 15	200
15 or more and less than 18	225
18 or more and less than 30	250
30 and above	275

- (2) In case of group housing, the maximum permissible F.A.R. shall be 175. However additional F.A.R. up to 25 shall be allowed for dwelling units meant exclusively for L.I.G./E.W.S.
- (3) In case of Institutional and Assembly Buildings the maximum permissible F.A.R. shall be 150 for plots up to 1,000 sq. m. and 175 for plots above 1,000 sq. m.

- (4) In case of transport related activities such as railway yards, railway station, bus stands, bus shelters, transport depot, airport, special warehousing, cargo terminals etc. the maximum permissible FAR shall be 100.
- (5) In case of Industrial building the maximum F.A.R. shall be 100.
- (6) In case a part of the plot is acquired / donated for public purpose like road, drain, etc., the Authority may allow additional F.A.R. up to 25.
- (7) The Authority may allow premium F.A.R. up to 25 on payment of fees to be decided by the Authority from time to time, on roads of width 18 mt. and above with the approval of the Government. The Authority may refund the fee proportionate to 10 premium F.A.R. in case of platinum certified green buildings.
- (8) The benefit of unutilized F.A.R. in respect of Apartment Buildings/ Group Housing shall be made available to the society and not to the Builder/ Developer.
- (9) Where a land is required for public purpose the owner of the land shall be entitled to avail equivalent additional F.A.R. in the form of T.D.R. (Transferable Development Right) as per the modality approved by the Government.
- (10) Exclusive multistory parking blocks can be provided within the required setback area without reducing the driveway for the fire tender to the extent of minimum 6 mtr. This will not be included in the calculation of coverage and F.A.R.
- (11) F.A.R. shall not include—
 - A. A basement or cellar and space under a building constructed on stilts and used as a parking space, and air-conditioning plant room used as accessory to the principal use;
 - B. Electric cabin or substation, watchman booth of maximum size of 3 sq.m. with minimum width or diameter of 1.732 m., pump house, garbage shaft, space required for location of fire hydrants, electric fittings and water tank, society room of maximum 12 sq.mtr.
 - C. Projections and accessories buildings as specifically exempted from the open space/setback requirement.
 - D. Staircase room and lift rooms above the topmost storey, architectural features, and chimneys and elevated tanks of dimensions as permissible under the N.B.C.; the area of the lift shaft shall be taken only on one floor.

Height of a building. **33.** (1) The height of the building shall be governed by the limitations of Floor Area Ratio, open space (setbacks), and the width of the street facing the plot described as detailed below:

- A. The maximum height of a building shall in no case exceed 1.5 times X the width of the road on which the plot abuts + the front setback. However, higher height on account of premium F.A.R. may be permitted with the approval of the Government.
- B. If a building abuts on two or more streets of different widths, the building shall be deemed to face upon the street that has the greater width and the height of the building shall be regulated by the width of the street.

(2) Notwithstanding anything contained in Sub-Regulation (1) the height restrictions with respect to approach Funnels and Transitional area of Airport as detailed in Tables 7 and 8 shall be adhered to.

TABLE 7— HEIGHT RESTRICTION WITH RESPECT TO APPROACH FUNNELS

Distance from nearest runway end (in metres)	Maximum Permissible height above the elevation of the nearest runway end (in metres)
Up to 360	0
361 to 510	6
511 to 660	9
661 to 810	12
811 to 960	15
961 to 1110	18
1111 to 1260	21
1261 to 1410	24
1411 to 1560	27
More than 1560	30

TABLE 8— HEIGHT RESTRICTION WITH RESPECT TO TRANSITIONAL AREA

Distance of the Inner Boundary of the Transitional Area (Outer Boundary of the Air Port) (Metres)	Maximum Permissible height above the elevation of the airport reference point [metres]
Up to 21	0
22 to 42	3
43 to 63	6
64 to 84	9
85 to 105	12
106 to 126	15
127 to 147	18

148 to 168	21
169 to 189	24
190 to 210	27
More than 210 M	30

- (3) Notwithstanding anything contained in the Tables under sub-Regulation (1), no Radio Aerial, T.V. Antenna, Cell phone tower or such similar type of installations exceeding 52 metres in height shall be erected without prior permission of the concerned Civil Aviation Authority.
- (4) No building structure or installation exceeding the height indicated in the said Tables shall be permitted unless the applicant produces a 'No-Objection Certificate' from the Airport Authority.

Off Street
Parking
Space.

- 34.** (1) In all buildings including Apartment Buildings/ Group Housing, Hotels, Restaurants and Lodges, business buildings, commercial buildings, Institutional buildings like hospitals, educational buildings like schools and colleges, multi-storeyed buildings/complexes, etc. and all other non-residential activities provision shall be made for parking spaces as per the following requirements.

TALBE 9— OFF STREET PARKING SPACE FOR DIFFERENT CATEGORY OF OCCUPANCIES

Sl. No.	Category of building/ activity	Parking area to be provided as percentage of total built up area
(1)	(2)	(3)
1	Shopping malls, Shopping malls with Multiplexes/ Cineplexes, Cinemas, Retail shopping centre and I.T./I.T.E.S. complexes.	60
2	Hotels, restaurants, lodges, other commercial buildings, assembly buildings, offices and high-rise buildings/ complexes.	40
3	Residential apartment buildings, Group Housing, Clinics, Nursing Homes, Hospitals, Institutional and Industrial buildings.	30

- (2) The parking spaces may be provided in (for all schemes)
 - A. Basement or cellar,
 - B. on stilt floor,
 - C. open parking area
 - D. exclusive multi-level car parking, or
 - E. a combination of any or all of the above.
- (3) Off-street parking spaces shall be provided with adequate vehicular access to a street and the area of drives, aisles and such other provisions required for adequate maneuvering of vehicles and shall be in addition to the parking space stipulated in these Regulations.
- (4) If the total off-street parking space required under these Regulations is provided by a group of property owners at a place for their mutual benefit, such parking spaces may be construed as meeting the off-street parking requirement, however, subject to the approval of the Authority.
- (6) Garage with locking facilities shall be included in the calculation of floor space for determining the requirement of parking space, unless this is provided in the basement of a building or under a building constructed on stilts with no external walls.
- (7) The parking spaces to be provided shall be in addition to the open spaces (setback) required around a building under these Regulations. However, one row of car parking may be provided in the front open space and one row of scooter or motor cycle parking may be provided in any one of the side open space without reducing the clear vehicular access way to less than 6.0 metres.
- (8) Stilt floor/Cellar parking floor shall be used only for parking and not for any habitation purpose. Misuse of the area specified for parking of vehicles for any other use shall be summarily removed / demolished by the Authority.
- (9) For parking spaces in basements and upper storeys of parking floors, at least two ramps of minimum 3.6 m width or one ramp of minimum 5.4 m width and adequate slope shall be provided. Such ramps may be permitted in the side and rear setbacks after leaving sufficient space for movement of fire-fighting vehicles. Access to these may also be accomplished through provisions of mechanical lifts.
- (10) Up to 10% of cellar may be utilized for utilities and non-habitation purpose like A/C plant room, Generator room, Electrical installations, laundry, etc.

- (11) At least 20% of the parking in group housing, apartment buildings shall be earmarked for visitors. The visitors parking facility shall be open to all visitors.
- (12) Every building except a residential building having less than four dwelling units will have parking space earmarked for ambulance, fire tender and physically challenged persons.
- (13) In respect of Apartment Complexes/Building/Block, in sites up to 750 sq. m. the parking requirement shall be deemed to be met if the entire stilt floor is left for parking. A W.C./Toilet facility shall be provided for watch and ward in the stilt floor.
- (14) Apart from use of Basement for Services/Parking/ Storage, it may be used for other activities like Library, Study Room, Games Room and Laundry only in case of Residential and Institutional Buildings.

Interior open
space.

- 35. (1)** At least one side of all the rooms intended for human habitation, if such room does not abut on the front or the rear or the side setbacks, shall abut on an interior open space whose minimum dimension shall be 3 meters x 3 metres in cases of buildings up to a height of 12 meters. In cases where the height of the building is more than 12 meters, the width of the interior open space shall be increased at the rate of one meter for every additional 3 (three) meters height. This provision shall be applicable to all categories of buildings, namely, residential, group housing, commercial, public, and semi-public and industrial.
- (2) For ventilating the spaces for water closets and bathrooms, ventilation shafts shall be provided with size as provided under clause 8.2.5, part-3 of N.B.C., 2005.

H e i g h t
exemption of
a building.

- 36. (1)** The following appurtenant structures shall not be included in the height of the building :—
- A. Roof tanks and their supports (with support height not exceeding 1 m.)
 - B. Ventilating, air conditioning, lift rooms and similar service equipments
 - C. Stair cover not exceeding 2.5 m. in height and
 - D. Chimneys, parapet walls and architectural features not exceeding 1.2 m. in height.

Exemption in
open space.

- 37. (1)** Every open space provided either in the interior or exterior in respect of any building shall be kept free from any erection thereon and shall be open to the sky and no cornice, roof, or weather shade of more than 0.75 m. in width shall overhang or project over such open space.

- (2) A portico of up to 2.5 m. width and 4.6 m. length with a minimum height of 2.1 m. from the plinth level may be permitted within the side setback. A garage is permissible at the rear end of side open space provided no openings are located on the side and rear boundary. Access to the top of the portico/garage should not affect the privacy of the neighboring plot.
- (3) The portico provided as above should not rest on the boundary wall and should be open to provide through excess to the rear. In case the Portico is not a cantilevered one and supported by pillars the area shall be included in the coverage.

Basement/
Cellar. **38.** (1) Basement shall not be permitted in low lying area and areas without adequate drainage facilities to ensure drainage from the basement.

- (2) Construction of a basement may be allowed by the Authority in accordance with the provisions contained in the development plan applicable to the concerned area.
- (3) The basement shall only be put to the following uses:
 - A. Storage of household or other non-combustible materials;
 - B. Strong room, bank cellars, etc ;
 - C. Installation of air-conditioning equipments and other machines used for service and utilities of building;
 - D. Parking places.
- (4) The basement shall be permitted to be constructed within the prescribed set back and maximum coverage applicable to the building. However, in case of non residential buildings, the basement shall be allowed under the entire plot area and shall be limited to two in number. The basements shall be use exclusive for parking/ services/storage.
- (5) The basement shall fulfill the following requirements:
 - A. Every basement shall be in every part at least 2.5 m. in height from the floor to the soffit of the roof slab or ceiling;
 - B. Adequate ventilation shall be provided for the basement. The standard of ventilation shall be the same as required by the particular occupancy according to regulations. Any deficiency may be met by providing adequate mechanical ventilation in the form of blowers, exhaust fans (one exhaust fan for 50 Sq.m. of basement area), air-conditioning system, etc;

- C. The minimum height of the ceiling of upper basement shall be 1.00 m. and the maximum, 1.5 m. above the average surrounding ground level;
- D. Adequate arrangement shall be made, so that surface drainage does not enter the basement;
- E. The walls and floors of the basement shall be water-tight and be so designed that the effect of the surrounding soil and moisture, if any, are taken into account in design and adequate damp proofing treatment is given;
- F. The access to the basement shall be separate from the main and alternative staircase providing access and exit from higher floors shall be provided. Where the staircase is continuous in the case of buildings served by more than one staircase, the same shall be of enclosed type serving as a fire separation from the basement floor and higher floor. Open ramps shall be permitted if they are constructed within the building line subject to provision of (D) above.
- G. The ramp providing access to basement to be used for parking shall have a gradient not steeper than 1:12 and this shall not disturb the minimum setback area of the building.

Provision of Lift. **39.** (1) Lift shall be provided for buildings above 10 m. height in case of apartments, commercial, institutional and office buildings.

(2) Lift shall be provided at the rate of one lift for twenty dwelling units, or part thereof for residential buildings and at the rate of one lift per one thousand Sq.m. or part thereof of built-up area for non-residential buildings. The tenement and built-up area on ground floor and two upper floors shall be excluded in computing the above requirement.

(3) Notwithstanding anything contained in these Regulations in case of building with 21 m. or more in height, at least two lifts shall be provided.

Mezzanine **40.** Mezzanine floor may be permitted above any floor in all types of buildings up to an extent of one-third of the actual covered area of that floor. All mezzanine floors shall be counted toward F.A.R. calculation, except the mezzanine floor over the ground floor.

Heritage Zone **41.** The Authority may notify the Heritage Zones in consultation with the Archaeological Survey of India, State Department of Archaeology, Bhubaneswar Municipal Corporation and the Art Commission.

Barrier free access for the physically challenged person.

- 42.** Adequate provision for facilitating easy access of physically challenged persons shall be made in all public buildings in accordance with the provisions of National Building Code of India including the minimum facility to reach the staircase/lift without any barrier. (Refer to Annex-D, Part-3 of NBC)

Rain water harvesting system.

- 43.** Provision of rain water harvesting is mandatory for all plots, which are more than 300 Sq.m. in area. The dimension of recharging pits/trenches should be at least 6 cubic meters for every 100 sq. m. of roof area. Percolation Pits shall be filled with small pebbles or brick jelly or river sand and covered with perforated concrete slabs. Apart from this, the following requirements are optional and may be provided depending on site conditions.

A. Terrace Water Collection— The terrace shall be connected to a sump or the well through a filtering tank by PVC pipe. A valve system shall be incorporated to enable the first part of the rain water collected to be discharged out or to the soil if it is dirty. A filtering tank measuring 0.36 sq. m. can be constructed near the sump. The tank can be divided by a perforated slab and one part should be filled by small pebbles and other by brick jelly. The bottom portion of the tank should have a slope to avoid stagnation of water.

B. Open Ground— Where there is open ground, a portion of topsoil should be removed and replaced with river sand to allow slow percolation of rain water. Any other method proved to be effective in conservation and harvesting of rain water may be adopted in each and every construction taken up.

PART-V

SPECIFIC REGULATIONS

- Apartment **44.** (1) No apartment building shall be permitted on plots less than 500 sq. m. in size.
- (2) In apartment building with joint ownership of land the owner / developer shall provide floor space for house owner's society office / assembly at the rate of 1 sq. m. per/flat provided that the minimum area shall not be less than 12 sq. m..
- (3) One staircase for every 6 dwelling units or fraction thereof in a floor shall be provided.
- Group housing. **45.** (1) The minimum size of site for group housing shall be 4000 sq. m.
- (2) In addition to other requirements the group housing schemes shall be accompanied by :
- A.** A services and utilities plan as per standards for water supply system, drainage and storm water disposal system, sewerage system, rain water harvesting structures, and for other utilities.
- B.** A landscape plan including rain water harvesting/water recycling details.
- C.** Parking & internal circulation plan along with common pool parking area plan, if any. The above shall be drawn on suitable scale with relevant details.
- (3) The minimum abutting road width shall be 9 m. for non-high-rise and 15 m. for high-rise building Blocks and should be blacktopped.
- (4) The maximum ground coverage shall be 35% and maximum FAR shall be 175.
- (5) Common facilities like shopping centre, community hall or centre/club, etc. are required to be provided in up to 5% of the area and shall be planned and developed in cases where the units are above 50 in number and not to be part of the residential Blocks.
- (6) A through public access road of 9 m. width with 2 lane black topping is to be developed on any one side at the periphery as per suitability and feasibility for the convenience of accessibility of other sites and lands located in the interior.

- (7) In case of Blocks up to 12 m. heights, access through pathways of 6 m. widths would be allowed. All internal roads and pathways shall be developed as per standards.
- (8) Minimum of 15% of site area shall be earmarked for organized open space and be utilized as greenery, tot lot or soft landscaping, etc. and shall be provided over and above the mandatory open spaces. This space may be in one or more pockets.

Outhouse

46. An outhouse with zero rear and one side set back may be permitted on a plot having an area not less than 150 sq.m., provided that:

- (1) the coverage of the outhouse shall not exceed 30 sq.m. and the height shall not exceed 3 m.;
- (2) the coverage of the outhouse and that of the main building together shall not exceed the permissible coverage for the concerned plot;
- (3) the outhouse shall not cover more than one-third of the width and more than one-fourth of depth of the plot and shall not abut any public road;
- (4) a minimum 1.5 m. strip of land shall be kept open to the sky between the main building and the outhouse;
- (5) no opening either in the form of windows or doors or ventilators shall be provided to the adjoining properties;
- (6) outhouses with sloping roof would only be permitted. In no case permission for outhouses would be granted with reinforced concrete cement flat roof.

Requirements
for Basti
Area.

47. (1) In a Basti area, permission to erect a building may be given on the basis of the available width of means of access, provided that where the width of means of access is 4.5 metres or less, the coverage shall be limited to 50% of the plot area and the maximum height of the building limited to two storeyed and the F.A.R. limited to 100.

- (2) For plots with narrow width (7.5 metres) zero setback may be allowed on one side with a passage of one meter on the other side.
- (3) The rear setback and front setback shall not be less than 3.0 m. and 1.5 m. respectively.
- (4) In each house on a Basti plot having one side setback, an internal court-yard of not less than 10 sq. m. in area and not less than 2.5 m. in width shall be provided in such a way that at least one wall of each living room abuts such court-yard or a verandah opening to such court-yard.

Semi-detached and row housing.

- 48.** (1) Owners of adjacent similar dimension plot abutting a road may be permitted to construct row or semi-detached buildings.
- (2) The orientation of the row or semi-detached building shall preferably be such that the prevailing south-west summer breeze can be availed by each dwelling unit.
- (3) For semi-detached buildings over two adjacent plots, the setbacks, the height and the FAR shall be regulated by treating both the plots as one.
- (4) In case of row housing, the length of a row shall not exceed 30 m. along the road on which such houses abut. In case, the dwelling units in a row are scattered the maximum length of the road shall be 100 m..
- (5) For row houses the ground coverage shall not be allowed to exceed 60% and the FAR more than 150.
- (6) The minimum size of the plot on which a unit of a row housing may be allowed shall be 30 sq. m..

Shop-cum-residence.

- 49.** Where plots are allotted in a row for shop-cum-residential purpose the Authority may allow construction of shop-cum-residential building without any side setbacks up to a depth of 10 meters from the front exterior wall. Provided that no part of the building up to said depth is used for residential purpose on the ground floor. No building exceeding 11 meters in height shall be allowed to be constructed as a shop-cum-residential plot, unless so permitted under the Zonal Development Plan, provided that the shop-cum-residence shall have $\frac{2}{3}^{\text{rd}}$ of the total floor area used for shops. The FAR and other parameters shall conform to that specified for commercial buildings.

Cinema, Multiplex and Theatre building.

- 50.** (1) The relevant provisions of the Orissa Cinemas (Regulations) Rules, 1954 shall apply for planning, designing and construction of Cinema and Theatre buildings.
- (2) No permission for construction of a building to be used as a cinema hall, theatre or auditoria for cultural show shall be granted unless the construction of such buildings conforms to the provisions of the Orissa Cinema (Regulations Act, 1954 and the Orissa Cinematograph Rules, 1939) or any other law in force in the State.
- (3) No permission to construct a cinema hall on a site shall be given unless such site has been approved by the Authority for construction of a cinema hall thereon.
- (4) Excepting provision for restaurant and incidental facilities no other use shall be permitted in a cinema building.

- (5) All cinema, theatre or auditoria buildings shall conform to IS; 4898-1968 and acoustics design of such buildings shall adhere to the requirements of IS; 2526-1963.
- (6) Exits and fire safety requirements shall be in accordance with Part-IV (Fire and life safety) of National Building Code of India, 2005.

Liquefied
Petroleum
Gas Cylinder
Godown.

- 51.** (1) Vacant space shall be maintained at all times, with the following distances for storage shed used for the storage of liquefied petroleum gas cylinders between any building, public space, public road or any adjoining property which may be built upon and the said storage shed.

TABLE 10— MINIMUM DISTANCES REQUIRED FOR STORAGE SHED OF LIQUEFIED PETROLIUM GAS CYLINDERS

Quantity of Compressed Gas in Cylinders (Kg.)	Minimum Clear Distance to be kept (metres.)
0—100	1
101 —1000	3
1001— 4000	5
4001—8000	7
8001—12000	9
12001—30,000	12
Over 30,000	15

- (2) Notwithstanding anything contained in the conditions specified above, cylinders containing liquefied petroleum gas exceeding 100 Kilograms but not exceeding 300 Kilograms may be kept in a storage shed forming part of, or attached to building, if it is separated therefrom by a substantial partition and the only means of access to it is from outside. Such a storage shed shall not be situated under any staircase or near other entrances to or exits from the rest of the building or other buildings. A shed used for storage of liquefied petroleum gas cylinders shall be surrounded by a suitable fence to prevent unauthorised persons from having access to the shed.

Petrol Pump

- 52.** (1) Minimum distance from the road intersections shall be—

A. For minor roads having less than 30 m. width, 50 m.—

B. For major roads having width 30 m. or more 100 m.—

- (2) The minimum distance of the property line of petrol pump from the centre line of the road should not be less than 15 meters on roads having less than 30 m. width. In case of roads having 30 m. or more width, the width of the road should be protected.

(3) Plot size:

- A.** Only for filling stations — 30 m. X 17 m.
- B.** Filling-cum-service station —36 m. X30 m.
- C.** Frontage of the plot should not be less than 30 m.

(4) New petrol pump shall not be located on roads having less than 30 m. width.

(5) **(A) Other controls**

- (i) Ground coverage — 20%
- (ii) FAR — 20
- (iii) Max. height — 7 m.
- (iv) Canopy equivalent to permissible ground coverage within setback line.
- (v) Front set back — Minimum 6 m.

(B) Other regulations

- (i) NOC from Explosives/Fire Department
- (ii) License from the District Magistrate
- (iii) Ground coverage will exclude canopy area

(C) Compressed Natural Gas (CNG) mother station

- (i) Plot size (Max.) — 36 m. X 30 m.
- (ii) Maximum ground coverage — 20%
- (iii) Maximum height — 7 m. (single storey)
- (iv) Building component — Control room/office/
dispensary, store, pantry and W.C.

Farm House **53.** For construction of Farm House Building in Green Belt Use Zone—

- (1) Minimum size of plot—Minimum size of a plot for farm house shall not be less than 0.5 hectares.
- (2) Maximum coverage and F.A.R.

TABLE 11— MAXIMUM COVERAGE AND F.A.R.

a	Maximum permissible ground coverage for all types of activity.	15 percent
b	Maximum permissible FAR	25
c	Residential accommodation of watch and ward/maintenance staff.	100 sq. m.
d	Maximum height	10 m.
e	Setbacks	Front/side abutting road 15.0 m. and all other sides 9.0 m.

- (3) **Other Provisions**— Minimum 50 per cent of the total area of the farm house shall be under plantation/cultivation. At least 100 trees per hectare shall be planted out of which at least 50 per cent shall be evergreen trees.
- (4) Water supply, sewerage and drainage:
- A.** In case of a plot for a farm house having dwelling units the owner thereof shall be responsible to make lawful arrangements for potable water.
 - B.** The owner shall be responsible to provide drains in the farm house to be used for rain water and in case of dairy farm open or closed sanitary drains to clean sheds, as may be required by the Authority.
 - C.** The owner shall be responsible to provide septic tank with necessary disposal trenches for disposal of human and animal waste in the farm house within his own premises.
- (5) Electrification — The owner of a farm house shall obtain electric connection directly from the appropriate authority authorized for distribution on such terms and conditions at his own cost as decided by the appropriate Authority from time to time.

Heritage and
n a t u r a l
conservation.

- 54. Conservation of Heritage Buildings, Heritage Precincts and Natural features**— Conservation of buildings, artefacts, structures, areas and precincts of historic and /or aesthetic and/or architectural and /or cultural significance (Heritage buildings and heritage precincts) and/or natural features of environmental significance shall be taken up by the Bhubaneswar Municipal Corporation in accordance with the relevant provisions in force and those framed from time to time.

Barrier free
Access for
Non-
Handicapping
Environment.

- 55.** Barrier free environment is one, which enables people with disabilities to move about safely and freely and to use all facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can get into and participate in all activities without assistance.

The main purpose is to integrate disabled and elderly persons fully into the society. In view of the above, the Government of India has enacted the Disabilities Act, 1955. Sections 44, 45 and 46 of the Act stipulates that the appropriate Governments, local authorities to ensure provisions of barrier free facilities in all new Government buildings and public utilities roads and transport. Also, in 1996 Government of India, enacted another persons with

Disabilities (Equal Opportunity, Protection of Rights and Full Participation) Act for the Barrier Free Environment for differently abled persons. These bye-laws are applicable to all buildings and facilities used by the public. It does not apply to private & public residences.

- (1) **Site development**—Level of the roads, access paths and parking areas shall be described in the plan along with specification of the materials.
- (2) **Access Path/ Walk Way**:—Access path from plot entry and surface parking to building entrance shall be minimum of 1800 mm. wide having even surface without any steps. slope, if any, shall not have gradient greater than 5%. Selection of floor materials shall be made suitably to attract or to guide visually impaired persons (Limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emit different sound to guide visually impaired persons hereinafter referred to as “guiding floor material”). Finishes shall have non slip surface with a texture traversable by a wheel chair. Curbs wherever provided should blend to a common level.
- (3) **Parking**—For parking of vehicles of handicapped people the following provisions shall be made:
 - A. Surface parking for two car spaces shall be provided near entrance for the physically handicapped persons with maximum travel distance of 30 meter from building entrance.
 - B. The width of parking bay shall be minimum 3.6 meter.
 - C. The information stating that the space is reserved for handicapped persons shall be conspicuously displayed.
 - D. Guiding floor materials shall be provided or a device which guides visually impaired persons with audible signals or other devices which serves the same purpose shall be provided.
- (4) **Building requirements**—The specified facilities for the buildings for handicapped persons shall be as follows:
 - Approach at plinth level
 - Corridor connecting the entrance/exit
 - Stairways
 - Lift
 - Toilet
 - Drinking water

A. Approach at plinth level— Every building should have at least one entrance accessible to the handicapped and shall be indicated by proper signage. This entrance shall be approached through a ramp together with stepped entry.

B. Ramp Approach— Ramp shall be finished with non-slip material. Minimum width of ramp shall be 1800 mm. with maximum gradient 1:12, length of ramp shall not exceed 9 meter having 800 mm. high hand rail on both sides extending 300 mm. beyond top and bottom of the ramp. Minimum gap from the adjacent wall to the hand rail shall be 50 mm.

C. Stepped Approach— For stepped approach width of tread shall not be less than 300 mm. and maximum riser shall be 150 mm. Provision of 800 mm. high hand rail on both sides of the stepped approach similar to the ramp approach shall be made.

D. Exit/Entrance Door— Minimum clear opening of the entrance door shall be 900 mm. and it shall not be provided with a step that obstructs the passage of a wheel chair user. Threshold shall not be raised more than 12 mm.

E. Entrance Landing— Entrance landing shall be provided adjacent to ramp with the minimum dimension 1800 mm. X 2000 mm. The entrance landing that adjoins the top end of a slope shall be provided with floor materials to attract the attention of visually impaired persons (limited to coloured floor material whose colour and brightness is conspicuously different from that of the surrounding floor material or the material that emits different sound to guide visually impaired persons hereinafter referred to as “guiding floor material”). Finishes shall have a non-slip surface with a texture traversable by a wheel chair. Curbs wherever provided should blend to a common level.

F. Corridor connecting the entrance/exit for the handicapped—

The corridor connecting the entrance/exit for handicapped leading directly outdoors to a place where information concerning the overall use of the specified building can be provided to visually impaired persons either by a person or by signs, shall be provided as follows:

- (i) Guiding floor materials, shall be provided or devices that emit sound to guide visually impaired persons.
- (ii) The minimum width shall be 1250 mm.
- (iii) In case there is a difference of level, slope ways shall be provided with a slope of 1:12.
- (iv) Hand rails shall be provided for ramps/slope ways at a height of 800 mm.

(7) Stairways— One of the stairways near the entrance/exit for the handicapped shall have the following provisions:

- A. The minimum width shall be 1350 mm.
- B. Height of the riser shall not be more than 150mm and width of the tread 300mm. The steps shall not have abrupt (square) nosing.
- C. Maximum number of risers on a flight shall be limited to 12.
- D. Hand rails shall be provided on both sides and shall extend 30mm on the top and bottom of each flight of steps.

(8) Lifts— Wherever lift is required as per bye-laws, provision of at least one lift shall be made for the wheel chair user with the following cage dimensions of lift recommended for passenger lift of 13 persons capacity by Bureau of Indian Standards.

Clear internal depth: 1100mm

Clear internal width: 2000mm.

Entrance door width: 900 mm.

- A. A handrail not less than 600 mm. long at 1000mm. above floor level shall be fixed adjacent to the control panel.
- B. The lift lobby shall be of an inside measurement of 1800 mm x 1800 mm or more.
- C. The time of an automatically closing door should be minimum 5 seconds and the closing speed should not exceed 0.25 meter/sec.
- D. The interior of the cage shall be provided with a device that audibly indicates the floor the cage has reached and indicates that the door of the cage for entrance/exit is either open or closed.
- E. The control panel should have marking in Braille to help visually impaired.

(9) Toilets— One special W.C. in a set of toilets shall be provided for the use of handicapped with essential provision of wash basin near the entrance for the handicapped.

- A. The minimum size shall be 1500 x 1750 mm.
- B. Minimum clear opening of the door shall be 900mm and the door shall swing out.
- C. Suitable arrangement of vertical/horizontal handrails with 50mm clearance from wall shall be made in the toilet.
- D. The W.C. seat shall be 50mm from the floor.

(10) Drinking Water— Suitable provision of drinking water shall be made for handicapped near the special toilet provided for them.

(11) Designing for Children— In a building meant for the predominant use of the children, it is necessary to suitably alter the height of the handrail and other fittings and fixtures.

56 GUIDELINES FOR LAND USE ZONING IN HAZARD PRONE AREAS

(1) Objectives :

- A. The basic objective is to regulate land use in hazard prone areas to minimize the damage caused to the habitat, as a result of natural hazards viz. earthquakes, cyclonic storms and floods which occur from time to time. Land use zoning, therefore aims at determining the locations and the extent of areas likely to be adversely affected by the hazards of different intensities and frequencies, and to develop such areas in a manner that the loss to the development is reduced to the minimum.
- B. Land Use Zoning envisages certain restrictions on the indiscriminate development of the “unprotected” hazard prone areas and to specify conditions for safer development by protecting the area. In the former case, boundaries of different zones are to be established to prevent unrestricted growth there.

(2) Scope :

A. Areas covered under Comprehensive Development Plan, 2030

The guidelines for Land Use Zoning in Hazard Prone Areas are to be taken into consideration while formulating the Development Plan and Areas Plan under the O.D.A. Act, 1982.

B. Areas not covered under Development Plan

In such areas, these guidelines may be issued to the various local bodies, Municipalities, Individual Areas and Panchayats, enabling them to act while siting various development projects and deciding on construction of buildings, etc.

(3) Identification of Hazard Prone Areas :

A. Earthquake Prone Areas

- i. Intensities of VII or more on Modified Mercalli or MSK intensity scale are considered moderate to high. Areas under seismic zone III, IV and V as specified in IS 1893 are based on intensities VII, VIII, IX or more. Therefore, all areas in these three zones will be considered prone to earthquake hazards.

- ii. In these zones the areas which have soil conditions including the level of water table favourable to liquefaction or settlements under earthquake vibrations will have greater risk to buildings and structures which will be of special consideration under Land Use Zoning.
- iii. Under these zones, those hilly areas which are identified to have poor stability conditions and where landslides could be triggered by earthquake or where due to prior saturated conditions, mud flow could be initiated by earthquake will be specially risk prone.
- iv. Whereas, earthquake hazard prone areas defined in 'i' above are identified on the map given in IS 1893 to small scale and more easily identified in the larger scale state wise maps given in the Vulnerability Atlas of India, the special risk areas as defined in 'ii' and 'iii' above, have to be determined specifically for the planning area under consideration through special studies to be carried out by geologists and geo-technical engineers.

B. Cyclone Prone Areas :

- i. Areas prone to cyclonic storms are along the sea coast of India where the cyclonic wind velocities of 47 meter per second or more are specified in the Wind Velocity Map given in IS 875 (part 3) to a small scale and identified in the Vulnerability Atlas of India where the Maps are drawn state-wise to a larger scale.
- ii. In these cyclone prone areas, those areas which are likely to be subjected to heavy rain induced floods or to flooding by sea-water under the conditions of storm surge, are specially risky due to damage by flood flow and inundation under water.
- iii. Whereas, areas under 'i' are easily identified, those with special risk as under 'ii' have to be identified by special contour survey of the planning area under consideration and study of the past flooding and storm surge history of the area. These studies may have to be carried out through the Survey of India or locally appointed survey teams, and by reference to the Central Water Commission, Government of India and the concerned departments of the State.

C. Flood Prone Areas :

- i. The flood prone areas in river plains (unprotected and protected by bunds) are indicated in the Flood Atlas of India prepared by the Central Water Commission and reproduced on larger scale in the state wise maps in the Vulnerability Atlas of India.
- ii. Besides the above areas, other areas can be flooded under conditions of heavy intensity rains, inundation in depressions, backflow in drains, inadequate drainage, failure of protection works, etc.
- iii. Whereas, the flood prone areas under 'i' are identified on the available maps as indicated, the areas under 'ii' have to be identified through local contour survey and study of the flood history of the planning area. Such studies may be carried out through Survey of India or local survey teams, and by reference to the Central Water Commission and the concerned departments of Gujarat Government.

D. Land Use Zoning for Flood Safety —Some important considerations for regulating the land use in the planning areas are given below:

- i. Every settlement needs some open areas such as parks, play-grounds, gardens, etc. In one way it will be possible to develop such areas by restricting any building activity in vulnerable areas. Such a development will be in the interest of providing proper environment for the growth of such settlement.
- ii. On the same analogy, certain areas on either side of the existing and proposed drains (including rural drains) should be declared as green belts where no building or other activity should be allowed. This will not only facilitate improvements of these drains in future for taking discharges on account of growing urbanization, but will also help in minimizing the damage due to drainage congestion wherever rainfall of higher frequency than designed is experienced. These green belts at suitable locations can also be developed as parks and gardens.
- iii. In the existing developed areas, possibilities of protecting/relocation/exchanging the sites of vital installation like electricity sub-station/power houses, telephone exchange, etc. should be seriously examined, so that these are always safe from possible flood damage. Similarly, the pump station, the tube wells meant for drinking water supply should be raised above the high flood levels.

- iv. Similarly, possibility of removing or bypassing buildings/ structures obstructing existing natural drainage lines should be considered. In any case, with immediate effect unplanned growth can be restricted so that no construction obstructing natural drainage or resulting in increased flood hazard is allowed.

E. Approach for Land Use Zoning :

Following two alternatives can be adopted for dealing with the disaster risk problems.

- i. Leaving the area unprotected. In this case it will be necessary to specify Land Use Zoning for various development purposes as recommended under (G).
- ii. Using protection methods for the areas as a whole or in the construction of buildings, structures and infrastructure facilities to cater for the hazard intensities likely in the planning area.

It will be appropriate to prioritize buildings, structures and infrastructures in terms of their importance from the point of view of impact of damage on the socio-economic structure of the society. Prioritization scheme is suggested under (F.).

F. Prioritisation :

In regard to Land Use Zoning, different types of buildings and utility services may be grouped under three priorities as indicated below:

Priority 1—Defence installation, industries, public utilities like hospitals, electricity installations, water supply, telephone exchange, aerodromes, railway stations, commercial centres, libraries, other buildings or installations with contents of high economic value.

Priority 2—Public institutions, Government offices, universities and residential areas.

Priority 3—Parks, play grounds, wood lands, gardens, green belts and recreational areas.

G. Regulations for Land Use Zoning :

- i. Installations and Buildings of Priority 1 should be located in such a fashion that the area is above the levels corresponding to a 100 year flood or the maximum observed flood levels whichever

higher. Similarly they should also be above the levels corresponding to a 50 year rainfall flooding and the likely submersion due to drainage congestion.

- ii. Buildings of Priority 2 should be located outside the 25 year flood or a 10 year rainfall contour, provided that the buildings if constructed between the 10 and 25 year contours should have either high plinth level above 25 year flood mark or constructed on columns or stilts, with ground area left for the unimportant uses.
- iii. Activities of Priority 3 viz. play grounds, gardens and parks etc. can be located in areas vulnerable to frequent floods.

Signs and
Outdoor
Display
Structures.

59 Signs and Outdoor Display Structures :

- (1) These shall be governed by the relevant provisions of the Orissa Municipal Corporation Act/Orissa Municipal Act.
- (2) Within the Bhubaneswar Development Plan area where no specific guideline for the above structures is framed, the Authority shall prescribe the guidelines with approval of Government.

PART- VI

INTEGRATED TOWNSHIP

Large
Projects

- 60. (1)** “Integrated Township” is gaining increasing acceptance recent times. To give impetus to economic growth and to enhance the vibrance and dynamism of urban activities in Bhubaneswar, Integrated Townships with minimum 10 Ha of land having access from minimum 30 m. road width shall be allowed.
- (2)** The integrated Township shall be permitted in Residential / Institutional zones.
- (3)** Permissible land use within the town ship (%)
- | | |
|--|----------|
| A. Residential | .. 45-50 |
| B. Industrial, Non Polluting type | .. 8-10 |
| C. Commercial | .. 2- 3 |
| D. Institutional | .. 6- 8 |
| E. Recreational | .. 12-14 |
| F. Minimum internal road width | .. 18 m. |
- (4)** Other Regulations for approval of Integrated Township :
- A.** 12-14% of the total area shall be reserved for parks and open space. It shall be handed over to the authority free of cost and shall be maintained by the developer to the satisfaction of the authority
 - B.** 6-8% of the site area shall be reserved for public and semi-public use sites and shall be handed over to the Local Authority; the same shall be allotted by the Authority for development.
 - C.** The FAR shall be calculated on the area excluding common amenities such as road, open space, utility corridor etc.
 - D.** Road shown in Comprehensive Development Plan shall be incorporated within the plan and shall be handed over to the Local Authority free of cost after development.
 - E.** The FAR and coverage shall be 300 and 40% respectively.
 - F.** At least 15% of the housing units developed will be earmarked for EWS/LIG category.

PART - VII

MULTI-STOREYED BUILDINGS: ADDITIONAL REQUIREMENTS

Restriction on construction of Multi-storied building.

- 61. (1)** Construction of multi-storeyed building shall not be permitted in villages namely Bhubaneswar, Kapileswar, Rajarani and Dhauli in Bhubaneswar and Mukunda Prasad & Gadakhurda in Khurda. The Authority may include any other areas for prohibition of multi-storeyed building from time to time.
- (2) The Authority may restrict construction of multi-storeyed buildings in any other area on the basis of objective assessment of the available infrastructure and planning needs after obtaining due approval of the Government.
- (3) Before commencement of these Regulations, where permission has been granted conditionally, such cases shall be dealt with under these Regulations as far as possible, without any major change, or without removal of construction. However, where violation of Heritage Zone conditions has occurred, this relaxation shall not apply.

62. No multi-storeyed building shall be allowed to be constructed :

- A. With approach road less than 18 m. width;
- B. Within the heritage zone;
- C. On plot the size less than 2000 sq. m.
- D. In the corridor between Khandagiri and Khurda ; and
- E. Within 100 mtrs. From the centre of the National High way on either sides.

Application.

63. (1) A key plan showing

- A. the means of access from the street or streets to all the buildings existing and proposed at the site, to the parking space and facilities provided at the site for scavengers and fire protection;
- B. the spaces to be left around the building for access, parking, circulation of air, light and other amenity;
- C. the disposal system of storm and domestic refuse water; and
- D. Rain water harvesting structures.

(2) Building plans showing

- A. plan of all floors and covered area indicating clearly size and spacing of all framing members and sizes and arrangement of rooms and the position of staircase, ramps, lift, wells and circulation spaces;
- B. longitudinal cross section of the building including size of footings, basement and super structure framing members and details of building and room heights and of staircase;
- C. plans and sectional details of water supply, drainage and sewerage system of the building;
- D. internal electrical design;
- E. the general lay-out of the columns and load bearing walls; and
- F. a landscape plan showing the area to be developed as lawn, garden, plantation etc.

(3) No Objection Certificate

- A. In case of buildings having more than four floors or 15 [fifteen] meters and above height, NOC from the Chief Fire Officer having jurisdiction to the effect that the applicant has agreed to provide the fire fighting measures for the building as prescribed in the National Building Code, 2005 and to the effect that the plan provides access for easy movement of fire service vehicles in case of a fire in future;
- B. In all multi-storeyed buildings, from the Executive Engineer of State Public Health Engineering Department having jurisdiction for provision of water supply and sewerage to the proposed building ; and
- C. From the Local Authority in respect of drainage, solid waste disposal and sanitation.

(4) Statement and calculation sheets with regard to the plot area, floor-wise details of spaces under various categories like apartment or office spaces, lobby circulation, staircase, lift, mezzanine space, balconies and details of such area which are to be exempted from calculation of floor area ratio, and ;

(5) Details of structural plan and structural design including soil test certificate from a structural engineer. Provided further that while preparing the structural plan/ design following aspects should be taken into account :

- A. The loads and forces including seismic forces and wind loads which are to be taken into account for structural design of building shall be in accordance with the Section –1 (Loads) of Part-VI (structural design) of the National Building Code of India, 2005.
- B. The structural design of foundations and elements in sub-structure and super structure of wood, masonry, reinforced and pre stressed concrete and steel shall be in accordance with Section-2(foundation), Section 3 (wood), Section 4 (masonry), Section 5(concrete) and Section 6 (steel) of Part-VI (structural design) of the National Building Code of India, 2005.
- C. In case of building more than 30 mtrs. height the structural plan and the structural design shall have to be vetted by any State Resource Centre identified by Orissa State Disaster Management Authority or any reputed technical institution identified by the Authority.

(6) All plans, drawings, statements, design details shall bear the signature of the applicant and shall be duly countersigned by a empanelled Architect. All documents and plans related to structural designs shall bear the full name and full signature of a Structural Engineer. Plans and documents related to sanitary arrangements shall bear the full name and full signature of a Public Health Engineer.

Note:— 1. *The Empanelled Architect who has prepared the plan shall put the empanelment number and seal on all plans and documents signed by him and shall also furnish a certificate to the effect that he shall supervise the construction of the building and shall be responsible for any deviation from the approved plan except if the owner intimates that his services have been terminated.*

2. *The Empanelled Structural Engineer, who has prepared the structural design, shall put his seal and address on all the documents signed by him and shall also furnish a certificate to the effect that he shall supervise the structural part of the construction and shall be responsible for any structural failure except caused by unprecedented natural calamities in Form-VII and except if the owner intimates that his services have been terminated.*

3. *All aspects related to structural design, building surface, plumbing, electrical installation, sanitary arrangements, fire protection shall adhere to the specification, standards and code of practice recommended in the National Building Code of India, 2005 and any breach thereof shall be deemed to be a breach of the requirements under these Regulations.*

Stages of permission.

63. Permission for construction of a multi-storeyed building shall be given with the approval of the Authority and in following stages namely:-

- A. In the first stage permission shall be accorded conditionally to develop the infrastructure as per specification of Local Authority and Public Health Engineering Department.

B. After joint inspection up to 75% of the proposed building height shall be allowed.

C. After completion of construction up to 75% of the proposed building as per the approved plan and plantation of 20% of the plot area the remaining 25% construction shall be allowed.

Note :—*The plantation shall not obstruct free movement of fire tenders around the building.*

Commence-
ment of work.

64. (1) Every applicant or builder or owner shall submit a notice regarding his intention to commence the foundation work of the proposed multi-storeyed building to the Authority through authorised technical persons. The said notice shall be accompanied by the approved plan and should be in Form-V.

(2) Soon after the receipt of the notice referred to in sub- clause (1) above, the Authority shall send a team of officers to the proposed building site and the layout for foundation of the proposed multi-storeyed building shall be made in presence of those officers. The team shall also submit a report to the Authority to the effect that the lay-out has been made as per the approved plan.

(3) During or soon after the construction of the foundation work of the multi-storeyed building, the Vice-Chairman of the Authority or his representatives or independent Engineer/ Architect appointed by Authority shall inspect the construction to ensure that the setbacks, coverage, basement, if any, and foundation standards are according to the approved plan.

(4) The applicant/builder shall submit periodic progress report after casting of each floor slab in Form-VIII.

Liability of
defective
construction.

65. (1) For defective constructions, the Authority shall sue the owners, builders, architects and the engineers for both civil and criminal liabilities, besides taking action under these Regulations.

(2) Without prejudice to the provisions of the Act, the actions to be taken by the Authority shall include stop construction notices, cancellation of permission and removal of unauthorized constructions. Such actions shall be notified.

Mainte-
nance.

66. (1) The main entrance to the premises shall not be less than 6 (six) meters in width in order to allow easy access to fire engine. The gate shall fold back against the compound wall of the premises, thus leaving the exterior access way, within the plot, free for the movement of fire service vehicles. If archway is provided over the main entrances, the height of the archway shall not be less than 5 (five) meters.

- (2) For multi-storeyed group housing scheme on one plot, the access way within the premises shall not be less than 7.5 (seven and half) meters in width and between individual building blocks, there shall be an open un-built space of 6 (six) meters.
- (3) The space set apart for providing access within the premises shall, in no case, be included in the calculation of requirements pertaining to parking spaces and other amenities required to be provided for the building.
- (4) Every access way shall be properly drained and lit to the satisfaction of the Authority. Manhole covers or any other fittings laid within the right of way of the access way shall be flushed with the finished surface level of it so as not to obstruct safe movement of men and vehicles.
- (5) Reconstruction or addition or alteration to any multi-storeyed building shall not be taken in a manner which shall reduce the width of the access way to a level below the minimum prescribed limit under these Regulations.

Exit.

- 67.** (1) Every multi-storeyed building meant for human occupation or assembly, shall be provided with exit sufficient to permit safe escape of the occupants in case of fire or other emergencies.
- (2) An exit may be a door-way, corridor, passage way to an internal or external staircase or to a verandah or roof or terrace having access to a street.
- (3) Exits shall be so arranged as to provide continuous means of access to the exterior of a building or exterior open space leading to a street without passing through any occupied unit.
- (4) Exits shall be so located that the travel distance on the floor shall not exceed twenty meters in case of residential, educational, institutional and hazardous occupancies and thirty metres in the case of assembly, business, mercantile, industrial and storage occupancies. Wherever more than one exit is required for a floor of a building, exits shall be placed at a reasonable distance from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.
- (5) There shall be at least two exits serving every floor and at least one of them shall lead to a staircase.

- (6) The width of every exit shall not be less than one metre and shall be provided as per the following table.

TABLE – 16: NUMBER OF OCCUPANTS AS PER TYPE OF OCCUPANCY

Sl. No.	Type of occupancy	Number of occupants per unit exit	
		Staircase	Terrace
(1)	(2)	(3)	(4)
1	Residential	25	75
2	Mixed and other uses	50	75

Explanation:

A. Lifts and escalators shall not be considered as an exit.

B. 'Travel distance' means the distance from any point in the floor area to any exit measured along the path or egress except that when the floor areas are sub-divided into rooms, used singly or of rooms and served by suite corridors and passage, the travel distance may be measured from the corridor entrance of such rooms or suites to the nearest staircase or verandah having access to the street.

ICT landing points.

- 68.** Every multi-storeyed building complex shall have provision for Information and Communication Technology (ICT) landing point in the form of a room near the main entrance gate of dimension not less than 3 m. x 4 m. and having 3 m. clear height. The room shall have two fire proofs doors of 1.2 m. width opening outwards along with adequate ventilation in the form of windows/ventilators. Such room shall not be counted in coverage and FAR calculations.

Penal Action against Builders/ Technical personnel.

- 69.** (1) Notwithstanding anything contained in these regulations the Authority reserves the right to debar/ black list the builder/ technical person who has deviated from the professional conduct or has made any fraudulent statement or has misrepresented/suppressed any material facts in his application/ plan or is involved in construction of the building deviating from the approved plan/norms of these Regulations.
- (2) Before taking any action under clause (1) specified above the Authority shall issue a notice specifying the reasons thereof asking for a show-cause within 15 days as to why such builder/technical person shall not be debarred/black listed. After receipt of the show cause, if any, the same shall be placed before the Authority for a decision on debarring/black listing the technical person/builder. The decision of the Authority in this regard shall be published.
- (3) An appeal against an order under sub-clause (2) above shall lie under section 103 of the Act.

Occupancy
of the
building.

70. (1) No person shall occupy or allow any other person to occupy any part of the multi-storeyed building for any purpose until such building or any part of it, as the case may be, is granted occupancy certificate by the Authority.

(2) On receipt of completion certificate in Form-6 (Part-I & Part-II) the Planning Member with the approval of Vice-Chairman shall issue a provisional occupancy certificate in Form-X to enable the builder/land owner to obtain service connections.

The authorities entrusted with the job of providing services like electricity, water supply and sewerage shall not provide such services without provisional occupancy certificate by the Authority. However, temporary service connection may be provided for construction purpose.

(3) The builder shall cause to register an Association of apartment owners as required under the Orissa Apartment Ownership Act, 1982, before occupancy certificate for 50% or more of the floor area is given.

(4) The Builder shall submit a copy of the agreement it has entered into with the apartment owners. This agreement shall show the terms of maintenance of public utilities.

(5) On satisfactory compliance of above & provision of the services the final occupancy certificate shall be issued by the Planning Member with approval of the Vice-Chairman.

Completion of
construction.

71. Every applicant/ owner shall submit a notice in Form-VI (Part-I and Part-II) regarding completion of the construction of multi-storeyed building, to the Authority through the registered Architect/Structural Engineer, who has supervised the construction. The said notice shall be accompanied with the following documents :—

A. Three copies of plan of the completed building

B. A fee of Rs.5000

C. Record of Rights relating to ownership

D. Evidence that all public utility services and in particular, sewerage, drainage, water supply, and electricity have been linked to the main public utility system.

Issue of
occupancy
certificate.

72. (1) The Authority on receipt of the notice of completion, along with all the required documents, shall take a decision to either issue or refuse occupancy certificate in Form-X within thirty days from the date of receipt of such notice. This fact shall be published in the public notice.

(2) If the occupancy certificate is not issued by the Authority within sixty days from the receipt of notice, the owner can prefer an appeal under Section 18 or 103 of the Act.

(3) Where occupancy certificate is refused by the Authority, reasons thereof shall be communicated to the applicant and the same shall be

published. An appeal against such a decision will lie under Section 18 or 103 of the Act. The Appellate Authority shall be competent to seek the views of and implead as parties, authorities in charge of public utility services, as provided under the Act, under the Orissa Apartment Ownership Act, 1982 and apartment owners. Where non-provision of public utilities is likely to affect other residents, such residents can also be impleaded as parties.

Structural
Safety Design
and other
services
requirements

73. (1) Structural Design: The structural design of foundation, masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with Part-VI structural design, Section 1 (loads), Section 2 (foundation), Section 3 (wood), Section 4 (masonry), Section 5 (concrete) and Section 6 (Steel) of National Building Code of India taking into consideration all relevant Indian Standards prescribed by Bureau of Indian Standards including the Indian Standard given in IS-Code 1893-1984, 13920-1993, 4326-1993, 13828-1993, 13827-1993 and 13935-1993 for structural safety.

(2) Quality of Materials and Workmanship: All material and workmanship shall be of good quality conforming generally to accepted standards of Public Works Department and Indian Standard specification and Codes as included in Part-V Building Materials and Part-VII Construction practices and safety of National Building Code of India.

(3) Alternative Materials, Methods of Design & Construction and Tests : The provision of the Bye-Laws are not intended to prevent the use of any material or method of design or construction not specifically prescribed by the bye-law provided any such alternative has been approved. The building materials approved by B.I.S. or any statutory body will form part of the approved building material and technology as part of the Bye-Laws.

(4) Building Services—

A. The Planning, design and installation of electrical installations, air conditioning installation of lifts and escalators can be carried out in accordance with Part-VIII Building Services, Section 2 (electrical installation), Section 3 (air conditioning and heating), Section 5 (installation of lifts and escalators) of National Building Code of India, 2005

B. The number and type of lifts to be provided in different buildings shall be as given in NBC, 2005.

C. The requirements of electric sub-station and the provision of electric sub-station shall also require approval from Electricity Board concerned.

(5) Plumbing Services

- A. The planning, design, construction and installation of water supply, drainage and sanitation and gas supply system shall be in accordance with Part-IX, Plumbing Services, Section 1 (water supply); Section 2 (drainage and sanitation) and Section 3 (gas supply) of National Building Code of India, 2005.
- B. Requirement of water supply for various occupancies in buildings shall be as given in Table.
- C. Requirement of sanitary fittings and installations for different occupancies in buildings shall be as given in Table.

TABLE- 17: PER CAPITA WATER REQUIREMENT FOR VARIOUS OCCUPANCIES/USES

Sl. No.	Type of Occupancy	Consumption <i>Per capita</i> per day (in lt.)
1	Residential— (a) In living units (b) Hotels with lodging accommodation (per bed)	135 180
2	Educational— (a) Day schools (b) Boarding Schools	45 135
3	Institutional (Medical Hospitals)— (a) No. of beds not exceeding 100 (b) No. of beds exceeding 100 (c) Medical quarters and hostels	340 450 135
4	Assembly- Cinema theatres, auditoria, etc. (per seat accommodation)	15
5	Government or semi public business	45
6	Mercantile (Commercial)— (a) Restaurants (per seat) (b) Other business building	70 45
7	Industrial (a) Factories where bathrooms are to be provided (b) Factories where bathrooms are not to be provided	45 30
8	Storage (including Warehouses)	30
9	Hazardous	30
10	Intermediate Rail Stations (excluding mail and express stops).	45(25)*
11	Junction Station	70(45)*
12	Terminal Stations	45
13	International and Domestic Airports	70

* The values in parenthesis are for such stations, where bathing facilities are not provided.

Note: The number of persons for Sl. Nos. 10 to 13 shall be determined by the average number of passenger handled by the station daily with due consideration given to the use the facilities.

TABLE-18 : FLUSHING STORAGE CAPACITIES

Sl. No.	Classification of Building	Storage Capacity
1	For tenements having common conveniences	900 lt. net per w.c. seat
2	For residential premises other than tenements having common conveniences	270l lt. net for one w.c. seat each and 180 lt. for each additional seat.
3	For factories and workshops	900 lt. per w.c. seat and 180 lt. per urinal.
4	For cinemas, public assembly hall, etc.	900 lt. per w.c. seat and 350 lt. per urinal.

TABLE-19 : DOMESTIC STORAGE CAPACITIES

Sl. No.	No. of Floors	Storage Capacity	Remarks
For premises occupied tenements with common conveniences :			
1	Ground floor	Nil	Provided down take fittings are installed
2	Floors 2, 3,4, 5 and upper floors	500 litre per tenement	
For premises occupied as flats or blocks			
1	Ground floor	Nil	Provided down take fittings are installed
2	Floors 2, 3, 4, 5 and upper floors	500 litre per tenement	

- Note :**
1. If the premises are situated at a place higher than the road level in front of the premises, storage at ground level shall be provided on the same lines as on other floors.
 2. The above storage may be permitted to be installed provided that the total domestic storage calculated on the above basis is not less than the storage calculated on the number of down take fittings according to scale given below:

Down take taps	70 lt. each
Showers	135 lt. each
Bathtubs	200 lt. each

TABLE- 20 : SANITATION REQUIREMENTS FOR SHOPS AND COMMERCIAL OFFICES

Sl. No.	Sanitary Unit / Fittings	For Personnel
1	Water closet	One for every 25 persons or part thereof exceeding 15 (including employees and customers). For female personnel 1 for every 15 persons or part thereof exceeding 10.
2	Drinking Water Fountain	One for every 100 persons with a minimum of one on each floor.
3	Wash Basin	One for every 25 persons or part thereof.
4	Urinals	Same as Sl. No. 3 of Table 27
5	Cleaner's Sink	One per floor minimum, preferably in or adjacent to sanitary rooms.

Note: Number of customers for the purpose of the above calculation shall be the average number of persons in the premises for a time interval of one hour during the peak period. For male-female calculation a ratio of 1: 1 may be assumed.

TABLE-21(a) : SANITARY REQUIREMENTS FOR HOTELS

Sl. No.	Sanitary Unit	For Residential Staff	For Non-residential Staff	
			For male	For female
1	Water Closet (W.C.)	One per 8 persons omitting occupants of the attached water closet minimum of 2 if both sexes are lodged	1 for 1—15 persons 2 for 16—35 persons 3 for 36—65 persons 4 for 66—100 persons	1 for 1—12 persons 2 for 13—25 persons 3 for 26—40 persons 4 for 41—57 persons 5 for 58—77 persons 6 for 78—100 persons
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.
3	Urinals	Nil	Nil upto 6 persons 1 for 7—20 persons 2 for 21—45 persons 3 for 46—70 persons 4 for 71—100 persons	Nil
4	Wash Basins	One per 10 persons omitting each basin installed in the room / suite	1 for 15 persons 2 for 16—35 persons 3 for 36—65 persons 4 for 66—100 persons	1 for 1—12 persons 2 for 13—25 persons 3 for 26—40 persons 4 for 41—57 persons 5 for 58—77 persons 6 for 78—100 persons

5	Baths	One per 10 persons omitting occupants of room with bath in suite	Nil	Nil
6	Slop Sinks	One per 30 Bed-rooms (one per floor minimum)	Nil	Nil
7	Kitchen Sink	One in each Kitchen	One in each Kitchen	One in each Kitchen

TABLE-21(b) : FOR PUBLIC REST ROOMS

Sl. No.	Sanitary Unit	For Male	For Female
1	Water Closet	One per 100 persons up to 400 persons; for over 400 add at the rate of one per 250 persons or part thereof	Two for 10 persons up to 200 persons; over 200 add at the rate of one per 100 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.
3	Urinals	One for 50 persons or part thereof	Nil, up to 6 persons 1 for 7—20 persons 2 for 21—45 persons 3 for 46—70 persons 4 for 71—100 persons
4	Wash Basins	One per W.C. and urinal provided	One per W.C.
5	Baths	—	—
6	Slop Sinks	—	—
7	Kitchen Sink	One in each Kitchen	One in each Kitchen

Note: i) It may be assumed that the two-thirds of the number are males and one-third females

ii) One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.

TABLE-22 : SANITATION REQUIREMENTS FOR EDUCATIONAL OCCUPANCY

Sl. No.	Sanitary Unit	Boarding Institution		Other Educational Institution	
		For Boys	For Girls	For Boys	For Girls
1	Water Closet (W.C.)	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for every 40 pupils or part thereof	One for every 25 pupils or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.	One in each W.C.
3	Urinals	One per every 25 pupils or part thereof	..	One for every 20 pupils or part thereof	..
4	Wash Basins	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for every 40 pupils or part thereof	One for every 40 pupils or part thereof
5	Baths	One for every 8 pupils or part thereof	One for every 6 pupils or part thereof	One for every 40 pupils or part thereof	One for every 25 pupils or part thereof
6	Drinking Water Fountains	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof	One for every 50 pupils or part thereof
7	Cleaners Sink	One for Floor minimum	One for Floor minimum	One for Floor minimum	One for Floor minimum

TABLE-23 : NURSERY SCHOOLS

Sl. No.	Sanitary Unit	Requirement
1	Water Closet	One for every 15 pupils or part thereof
2	Ablution Taps	One in each W.C.
3	Urinals	—
4	Wash Basins	One for every 15 pupils or part thereof
5	Baths	One bath sink per 40 pupils
6	Drinking Water Fountains	One for every 50 pupils or part thereof
7	Cleaner's Sink	—

Note : 1. One water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinal.

2. For teaching staff, the schedule of sanitary units to be provided shall be the same as in case of office buildings (Table 27).

**TABLE - 24 : SANITATION REQUIREMENTS FOR INSTITUTIONAL
(MEDICAL) OCCUPANCY—HOSPITAL**

Sl. No.	Sanitary Unit	Hospitals with Indoor Patient Ward	Hospitals with Outdoor Patient Wards	
		For Males & Females	For Males	For Females
1	Water Closet (W.C.)	One for every 6 beds or part thereof	One for every 100 persons or part thereof	Two for every 100 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.
3	Wash Basins	Two up to 30 bed ; add one for every additional 30 beds or part thereof	One for every 100 persons or part thereof	One for every 100 persons or part thereof
4	Baths with Shower	One bath with shower for every 8 beds or part thereof.	—	—
5	Bed pan washing sink	One for each ward	—	—
6	Cleaner's Sinks	One for each ward	One per floor minimum	One per floor minimum
7	Kitchen sinks & dish washers (where Kitchen is provided)	One for each ward	—	—
8	Urinals	—	One for every 50 persons or part thereof	—

TABLE- 25: ADMINISTRATIVE BUILDINGS

Sl. No.	Sanitary Unit	For Males	For Females
1	Water Closet (W.C.)	One for every 25 persons or part thereof	One for every 15 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.
3	Wash Basins	One for every 25 persons or part thereof	One for every 25 persons or part thereof
4	Baths with Shower	One on each floor	One on each floor
5	Bed pan washing sink	—	—
6	Cleaner's Sink	One per floor minimum	One per floor minimum
7	Kitchen sinks & dish washers (where Kitchen is provided)	One for each floor	One for each floor
8	Urinals	Nil upto 6 persons 1 for 7—20 persons 2 for 21—45 persons 3 for 46—70 persons 4 for 71—100 persons From 101 to 200 persons add at the rate of 3%; for over 200 persons add at the rate of 2.5%	—

TABLE-26: SANITATION REQUIREMENTS FOR INSTITUTIONAL (MEDICAL) OCCUPANCY (STAFF QUARTERS AND HOSTELS)

Sl. No.	Sanitary Unit	Doctor's Dormitories		Nurses Hostel
		For Male Staff	For Female Staff	
1	Water Closet	One for 4 persons	One for 4 persons	One for 4 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each W.C.
3	Wash Basins	One for every 8 persons or part thereof	One for every 8 persons or part thereof	One for every 8 persons or part thereof
4	Bath with Shower	One for every 4 persons or part thereof	One for every 4 persons or part thereof	One for every 4 persons or part thereof
5	Cleaner's Sink	One per floor minimum	One per floor minimum	One per floor minimum

**TABLE-27:SANITATION REQUIREMENTS FOR GOVERNMENT AND
PUBLIC BUSINESS OCCUPANCY AND OFFICES**

Sl. No.	Sanitary Unit	For Male Personnel	For Female Personnel
1	Water Closet (W.C.)	One for 25 persons or part thereof	One for 15 persons or part thereof
2	Ablution Taps	One in each W.C.	One in each W.C.
3	Urinals	Nil up to 6 persons 1 for 7—20 persons 2 for 21—45 persons 3 for 46—70 persons 4 for 71—100 persons from 101 to 200 add at the rate of 3%; for over 200 persons add at the rate of 2.5%	—
4	Wash Basins	One for every 25 persons or part thereof	One for 15 persons or part thereof
5	Drinking Water Fountains	One for every 100 persons with a minimum of one on each floor	—
6	Baths	Preferably one on each floor	Preferably one on each floor
7	Cleaner's Sinks	One per floor minimum; preferably in or adjacent to sanitary rooms.	—

Note: One water tap with drainage arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinals.

TABLE-28 : SANITATION REQUIREMENTS FOR RESIDENCES

Sl. No.	Sanitary Unit	Dwelling with individual conveniences	Dwelling without individual conveniences
1	Bath Room	One provided with water tap	One for every two tenements
2	Water Closet (W.C.)	One	One for every two tenements
3	Sink (or Nahani) in the Floor	One	—
4	Water Tap	One	One with drainage arrangement in each tenement One in common bath rooms and common water closet.

Note : Where only one water closet is provided in a dwelling, the bath and water closet shall be separately accommodated.

TABLE-29: SANITATION REQUIREMENTS FOR ASSEMBLY OCCUPANCY BUILDINGS (CINEMA, THEATERS, AUDITORIA ETC.)

Sl. No.	Sanitary Unit	For Public		For Staff	
		Male	Female	Male	Female
1	Water Closet	One for 100 persons up to 400 persons. For over 400 persons, add at the rate of 1 per 250 persons or part thereof	Two per 100 persons up to 200 persons. For over 200 persons add at the rate of 1 per 100 persons or part thereof	One for 15 persons Two for 16—35 persons	One for 1—12 persons Two for 13—25 persons
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each WC	One in each WC
3	Urinals	One for 50 persons or part thereof	—	Nil up to 6 persons One for 7—20 persons Two for 21—45 persons	—

4	Wash Basins	One for every 200 persons or part thereof	One for every 200 persons or part thereof	One for 1—15 persons Two for 16—35 persons	One for 1-12 persons Two for 13-25 persons
5	Drinking Water Fountain	One per 100 persons or part thereof			

Note : (i) *One water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.*

(ii) *It may be assumed that two-thirds of the number are males and one-third females.*

TABLE-30 : SANITATION REQUIREMENTS FOR ASSEMBLY OCCUPANCY BUILDINGS (ART, GALLERIES, LIBRARIES AND MUSEUMS)

Sl. No.	Sanitary Unit	For Public		For Staff	
		Male	Female	Male	Female
1	Water Closet (W.C.)	One for 200 persons up to 400 persons. For over 200 persons, add at the rate of 1 per 250 persons or part thereof	One per 100 persons up to 200 persons. For over 200 persons add at the rate of 1 per 150 persons or part thereof	One for 1—15 persons Two for 16—35 persons	One for 1—12 persons Two for 13—25 persons
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each WC	One in each WC
3	Urinals	One for 50 persons or part thereof	—	Nil up to 6 persons One for 7—20 persons Two for 21—45 persons	—
4	Wash Basins	One for every 200 persons or part thereof. For over 400 persons, add at the rate of 1 per 250 persons or part thereof	One for every 200 persons or part thereof. For over 200 persons, add at the rate of 1 per 150 persons or part thereof.	One for 1—15 persons Two for 16—35 persons	One for 1—12 persons Two for 13—25 persons
5	Cleaner's Sink	One per floor minimum			
6	Drinking Water Fountain	One per 100 persons or part thereof			

Note : It may be assumed that two-thirds of the number are males and one-third females

TABLE-31 : SANITATION REQUIREMENTS FOR RESTAURANT

Sl. No.	Sanitary Unit	For Public		For Staff	
		Male	Female	Male	Female
1	Water Closet (W.C.)	One per 50 Seats up to 200 seats. For over 200 seats, add at the rate of 1 per 100 seats or part thereof	One per 50 seats up to 200 seats. For over 200 seats, add at the rate of 1 per 100 seats or part thereof	1 for 15 persons 2 for 16—35 persons 3 for 36—65 persons 4 for 66—100 persons	1 for 1—12 persons 2 for 13—25 persons 3 for 26—40 persons 4 for 41—57 persons 5 for 58—77 persons 6 for 78—100 persons
2	Ablution Taps	One in each W.C.	One in each W.C.	One in each WC	One in each WC
3	Urinals	One for 50 persons or part thereof	—	Nil up to 6 persons 1 for 7—20 persons Two for 21—45 persons 3 for 46—70 persons. 4 for 71—100 persons.	—
4	Wash Basins	One for every water closet			
5	Kitchen Sinks & Dish Washer	One per each kitchen			
6	Service Sink	One in the restaurant			

Note : (i) It may be assumed that two-thirds of the number are males and one-third females

(ii) One water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water closets and urinals.

TABLE-32 : SANITATION REQUIREMENTS FOR FACTORIES

Sl. No.	Sanitary Unit	For Male Personnel	For Female Personnel
1	Water Closet	1 for 15 persons 2 for 16—35 persons 3 for 36—65 persons 4 for 66—100 persons For 101 to 200 persons, add at rate of 3%. From over 200 persons, add at the rate of 2.5 %.	1 for 1—12 persons 1 for 13—25 persons 2 for 26—40persons 3 for 41—57persons 4 for 58—77 persons. 5 for 78—100 persons For 101 to 200 persons, add at the rate of 5%. From over 200 persons add at the rate of 4%.

Sl. No.	Sanitary Unit	For Male personnel	For Female personnel
2	Ablution Taps	One in each W.C	One in each W.C.
3	Urinals	Nil upto 6 persons 1 for 7—20 persons 2 for 21—45 persons 3 for 46—70 persons 4 for 71—100 persons From 101 to 200 persons add at the rate of 3%; for over 200 persons add at the rate of 2.5%.	—
4	Washing Taps with draining arrangement	One for every 25 persons or part thereof	
5	Drinking Water Fountains	One for every 100 persons with a minimum of one on each floor.	
6	Baths preferably Showers.	As required for particular trade or occupation	

Note: (i) For many trades of a dirty or dangerous character, more extensive provisions are required.

(ii) One water tap with draining arrangement shall be provided for every 50 persons or part thereof in the vicinity of water closet and urinal .

(iii) Crèches where provided shall be fitted with water closets (One for 10 persons or part thereof), wash basins (1 for 15 persons or part thereof) and drinking water tap with drinking arrangement for every 50 persons or part thereof .

TABLE-33: SANITARY REQUIREMENTS FOR LARGE STATIONS AND AIRPORTS

Sl. No.	Place	W.C. for Males	W.C. for Females	Urinals for Males only
1	Junction Stations, Intermediate Stations and Substations.	3 for first 1000 persons and 1 for subsequent 1000 persons or part thereof.	4 for first 100 persons and 1 for every additional 1000 persons or part.	4 for every 1000 person and 1 for every additional 1000 persons or part thereof.
2	Terminal Stations and Bus Terminals.	4 for first 1000 persons and 1 for every additional 1000 persons or part thereof.	5 for every 1000 person and 1 for every additional 200 persons or part thereof.	6 for every 1000 person and 1 for every additional 1000 persons or part thereof.

3	Domestic			
	Airports			
	Minimum.	2*	4*	2*
	For 200	5	8	6
	persons	9	15	12
	For 400	12	20	16
	persons	16	26	20
	For 600	18	29	22
	persons			
	For 800			
4	Airports			
	For 200	6	10	8
	persons	12	20	16
	For 600	18	29	22
	persons			
	For 1000			
	persons			

Note: 1. Provision for wash basins, baths including shower stalls, shall be in accordance with part ix Section 2- Drainage and Sanitation of National Building Code of India.

* Atleast one Indian style water closet shall be provided in each toilet. Assume 2/3 Males and 1/3 Females in any area.

Notes for general guidance for water supply arrangements:

1. For new construction: Provision shall be made for under ground tank for the storage of water, having capacity at 200 litres per person with adequate pumping arrangements to supply water to upper floors. Filtered water connection will be allowed only for use of drinking and bathing needs. For other purposes i.e. flushing and gardening etc., the individual shall be required to have own arrangements of tube well water within the premises. While according sanction to Layout Plan, the Authority shall make a special mention that provision for space shall be kept for the construction of underground reservoir of adequate capacity along with booster pumping station.
2. Arrangements as given in 1 above shall also be provided in Group Housing Schemes.
3. The plumbing arrangement in case of new constructions shall be made in a way that the potable water shall be used for drinking, cooking & bathing only and for rest of the uses, provision for ground water can be made with dual piping system.
4. Low capacity cistern should preferably be provided instead of normal 12.5 litres capacity.
5. Rain Water Harvesting: Water harvesting through storing of water runoff including rainwater in all new buildings on plots of 300 sq. m. and above will be mandatory. The plans submitted to the Authority shall indicate the system of storm water drainage along with points of collection of rain water in surface reservoirs or in recharge wells.
6. All building having a minimum discharge of 10,000 litres and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.

(6) **Installation of Solar Assisted Water Heating System in Buildings:**

No new building in the following categories in which there is a system of installation for supplying hot water shall be built unless the system of the installation is also having an auxiliary solar assisted water heating system:-

- Hospitals and Nursing Home
- Hotels, Lodges, and Guest Houses, Group Housing with the plot area of 4000 sq. m.
- Hostels of Schools, Colleges and Training Centres with more than 100 students.
- Barracks of Armed Forces, Paramilitary Forces and Police
- Individual residential buildings having more than 150 sq. m. plinth area.
- Functional Buildings of Railway Stations and Air Ports like waiting rooms, retiring rooms, rest rooms, inspection bungalows and catering units
- Community Centres, Banquet Halls, Barat Ghars, Kalyana Mandaps and buildings for similar use.

A. Definitions :

i)	“Solar Assisted Water Heating System”.	A device to heat water using solar energy as heat source.
ii)	“Auxiliary back up”	Electricity operated or fuel fired boilers/ systems to heat water coming out from solar water heating system to meet continuous requirement of hot water.
iii)	“New Building”	Such buildings of above said categories for which construction plans have been submitted to the Authority for clearance.
iv)	“Existing building”	Such buildings, which are licensed to perform their respective business.

B. Guidelines for Installation of Solar Water Heating System

i. New Buildings: Clearance of plan for the construction of new buildings of the aforesaid categories shall only be given if they have a provision in the building design itself for an insulated pipeline from the rooftop in the building to various distribution points where hot water is required. The building must have a provision for continuous water supply to the solar water heating system. The building should also have open space on the rooftop, which receives direct sun light. The load bearing capacity of the roof should at least be 50 kg. per sq m. All new buildings of above said categories must complete installation of solar water heating systems before obtaining necessary license to commence their business.

- ii. **Existing Buildings:** Installation of Solar Assisted Water Heating Systems in the existing building shall be made mandatory at the time of change of use to above said category provided there is a system or installation for supplying hot water.
- iii. **Capacity:** The capacity of solar water heating system to be installed on the building of different categories shall be decided in consultation with the local body. The recommended minimum capacity shall not be less than 25 litre per day for each bathroom and kitchen subject to the condition that maximum of 50% of the total roof area is provided with the system.
- iv. **Specifications:** Installation of Solar Assisted Water Heating Systems shall confirm to BIS specification IS 12933. The solar collectors used in the system shall have the BIS certification mark.
- v. **Auxiliary System :** Wherever hot water requirement is continuous, auxiliary heating arrangement either with electric elements or oil of adequate capacity may be provided.

Fire
Protection
and Fire
Safety
Requirement

74. (1) Scope: This part covers the requirements of the fire protection for the multi-storeyed buildings (high rise buildings) and the buildings, which are of 15 m. and above in height and low occupancies of categories such as Assembly, Institutional., Educational (more than two storeyed and built-up area exceeds 500 sq. m.). Business (where plot area exceeds 500 sq. m.), Mercantile (where aggregate covered area exceeds 750 sq. m.), Hotel, Hospital, Nursing Homes, Underground Complexes, Industrial Storage, Meeting/ Banquet Halls, Hazardous Occupancies.

(2) Procedure for Clearance from Fire Service

- A. The concerned Authority shall refer the building plans to the Chief Fire Officer for obtaining clearance in respect of building identified in clause 8.1 of these 73.1.
- B. The Authority shall furnish three sets of complete building plans along with prescribed fee to the Chief Fire Officer, after ensuring that the proposals are in line with Master Plan/Zonal Plan of the area.
- C. The plans shall be clearly marked and indicate the complete fire protection arrangements and the means of access/escape for the proposed building with suitable legend along with standard signs and symbols on the drawings. The same shall be duly signed/certified by a licensed Fire Consultant/Architect. The information regarding fire safety measures shall be furnished.
- D. The Chief Fire Officer shall examine these plans to ensure that they are in accordance with the provisions of fire safety and means of escape as per these bye- laws and shall forward two sets of plans duly signed for implementation to the Building Sanctioning Authority.

- E. After completion of fire fighting installations as approved and duly tested and certified by the licensed Fire Consultant / Architect, the Owner/ Builder of the building shall approach the Chief Fire Officer through the concerned Authority for obtaining clearance from fire safety and means of escape point of view. The concerned Authority shall ensure that clearance from Chief Fire Officer has been obtained for the building identified before granting the completion certificate.
- F. On receipt of the above request, the Chief Fire Officer shall issue the No Objection Certificate from fire safety and means of escape point of view after satisfying himself that the entire fire protection measures are implemented and functional as per approved plans.
- G. Any deficiencies observed during the course of inspection shall be communicated to the Authority for rectification and a copy of the same shall be forwarded to the concerned building owner/ builder.

(3) Renewal of Fire Clearance

On the basis of undertaking given by the Fire Consultant / Architect, the Chief Fire Officer shall renew the fire clearance in respect of the following buildings on annual basis:

- A. Public entertainment and assembly
- B. Hospitals
- C. Hotels
- D. Underground shopping complex
- E. Such other occupancies as decided by the Authority.

(4) Fee

For augmentation of fire service facilities for effecting rescue/fire fighting operation in high rise building, fee payable to Chief Fire Officer by the applicant(s) along with sets of plans for obtaining the No Objection Certificate shall be as prescribed by the Bhubaneswar Development Authority.

(5) Fire Consultant

The Architect of the project will be responsible for making provisions for fire protection and fire fighting measure as provided and for that he may consult an expert in this field, as in case of other professionals for structural, sanitary and others.

(6) Terminology

All the technical terms shall have the meaning as defined in National Building Code of India, 2005, Part-IV, Fire Protection as amended from

time to time but for the terms which are defined otherwise in these Regulations.

(7) General

The Chief Fire Officer may insist on suitable provisions in the building from fire safety and means of escape point of view depending on the occupancy, height or on account of new developments creating special fire hazard, in addition to the provision of these building Regulations and Part IV (Fire Protection) of National Building Code of India, 2005.

(8) Means of Access

The following provisions of means of access shall be applicable.

A. Provisions of Exterior Open Spaces around the Building

- i. The set backs of the respective building shall be as per Master Plan, Detailed Layout Plan, General Development Plan.
- ii. For multi-storeyed buildings identified the provision of exterior open spaces around the buildings shall be as given in Table.

TABLE-34: PROVISION OF EXTERIOR OPEN SPACES AROUND THE BUILDINGS

Sl. No.	Height of the Building Up to (m.)	Exterior open spaces to be left out on all sides in m. (front rear and sides in each plot)
1	10	As per prescribed set backs
2	15	5
3	18	6
4	21	7
5	24	8
6	27	9
7	30	10
8	35	11
9	40	12
10	45	13
11	50	14
12	55 and above	16

Note: On sides where no habitable rooms face, a minimum space of 9.0 m. shall be left for heights above 27.0 m.

- iii In case of multi-storeyed buildings the exterior open space around a building shall be of hard surface capable of taking load of fire engine weighting up to 45 tonnes.

(9) Exit Requirement

A. Type of Exits :

- i. Exits shall be either horizontal or vertical type. An exit may be doorway, corridor and passage to an internal staircase or external staircase, ramp or a verandah and/ or terraces that have access to the street or to roof of a building. An exit may also include horizontal exit leading to an adjoining building at the same level.
- ii. Lifts escalators and revolving doors shall not be considered as exits.

B. Number of Size of Exits :

The requisite number and size of various exits shall be provided, based on the occupants in each room and floor based on the occupant load, capacity of exits, travel distance and height of buildings as per one above.

C. Arrangements of Exits :

- i. Exits shall be so located so that the travel distance on the floor shall not exceed 22.50 m. for residential, educational, institutional and hazardous occupancies and 30.0 m. for assembly, business, mercantile, industrial and storage occupancies. Whenever more than one exit is required for a floor of a building they shall be placed as remote from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.
- ii. The travel distance to an exit from the remote point shall not exceed half the distance as stated above except in the case of institutional occupancy in which case it shall not exceed 6.0 m.

D. Capacity of Exit:

The capacity of exits (staircase, ramps and doorways) indicating the number of persons which could be safely evacuated through a unit exit width of 50 cm. shall be as given below:

TABLE-35 : OCCUPANTS PER UNIT EXIT WIDTH

Sl. No.	Group of Occupancy	Number of Occupants		
		Stairways	Ramps	Doors
1	Residential	25	50	75
2	Educational	25	50	75
3	Institutional	25	50	75
4	Assembly	40	50	60
5	Business	50	60	75
6	Mercantile	50	60	75
7	Industrial	50	60	75
8	Storage	50	60	75
9	Hazardous	25	30	40

E. Staircase Requirements:

There shall be minimum of two staircases and one of them shall be enclosed stairway and the other shall be on the external walls of building and shall open directly to the exterior, interior open space or to any open place of safety. Single staircase may be accepted for educational, business or apartment buildings where floor area does not exceed 300 sq m. and height of the building does not exceed 24 m. and other requirements of occupant load, travel distance and width of staircase shall meet the requirement. The single staircase in such case shall be on the outer wall of the building.

F. Minimum Width Provision for Stairways:

The following minimum width provisions shall be made for each stairway :

- | | |
|---|---------|
| i. Residential low rise building | 0.9 m. |
| ii. Other residential building e.g. flats | 1.25m |
| iii. Hostels, group housing, guest houses, etc. | 1.25 m. |
| iv. Assembly buildings like Auditorium,
Theatres and Cinemas | 2.0 m. |
| v. All other buildings including Hotels | 1.5 m. |
| vi. Institutional building like Hospitals | 2.0 m. |
| vii. Educational building like School, Colleges. | 1.5 m. |

G. Minimum Width Provision for Passageway/Corridors:

The following minimum width provisions shall be made for each passage way/corridor.

- | | |
|--|---------|
| i. Residential buildings, dwelling unit type | 1.0 m. |
| ii. Residential buildings, e.g., hostels, etc. | 1.25 m. |
| iii. Assembly buildings like Auditorium,
Theatres and cinemas | 2.0 m. |
| iv. All other buildings including Hotels | 1.5 m. |
| v. Hospital, Nursing Homes, etc. | 2.4 m. |

H. Doorways:

- i. Every doorway shall open into an enclosed stairway, a horizontal exit, on a corridor or passageway providing continuous and protected means of egress.
- ii. No exit doorways shall be less than 1 m. in width and 1.5 m. in case of hospital and ward block. Doorways shall not be less than 2.10 m. in height.
- iii. Exit doorways shall open outwards, that is away from the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing to less than 1m. Overhead or sliding door shall not be installed.

- iv. Exit door shall not open immediately upon a flight or stairs. A landing equal to at least, the width of the door shall be provided in the stairway at each doorway. Level of landings shall be the same as that of the floor, which it serves.
- v. Exit doorways shall be open able from the side, which they serve without the use of a key.
- vi. Revolving doors shall not be allowed.

J. Stairways:

- i. Interior stairs shall be constructed of non-combustible material throughout.
- ii. Interior stairs shall be constructed as a self-contained unit with at least one side adjacent to an external wall and shall be completely enclosed.
- iii. A staircase shall not be arranged round a lift shaft for buildings 15.0 m. and above height. The staircase location shall be to the satisfaction of Chief Fire Officer.
- iv. Hollow combustible construction shall not be permitted.
- v. The minimum width of treads without nosing shall be 25 cm. for an internal staircase for residential high-rise buildings. In the case of other buildings, the minimum tread shall be 30 cm. The treads shall be constructed and maintained in a manner to prevent slipping. Winders shall be allowed in residential buildings provided they are not at the head of a downward flight.
- vi. The maximum height of riser shall be 19 cm. in the case of residential high rise buildings and 15 cm. in the case of other buildings .These shall be limited to 13 per flight.
- vii. Handrails shall be provided with a minimum height of 1m. from the center of the tread.
- viii. The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.10 m.
- ix. For building more than 24 m. in height, access to main staircase shall be through a lobby created by double door of one hour fire rating. One of the doors will be fixed in the wall of the staircase and other after the lobby.
- x. No living space, store or other fire risk shall open directly into the staircase or staircases.
- xi. External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a draught lobby.
- xii. The main staircase and fire escape staircase shall be continuous from ground floor to the terrace level.
- xiii. No electrical shafts/AC ducts or gas pipe etc. shall pass through the staircase. Lift shall not open in staircase landing.
- xiv. No combustible material shall be used for decoration/wall paneling in the staircase.
- xv. Beams/columns and other building features shall not reduce the head room/width of the staircase.

- xvi. The exit sign with arrow indicating the way to the escape route shall be provided at a suitable height from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way marking sign should be flush with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipments. Further all landings of floor shall have floor-indicating boards indicating the number of floor.
- xvii. The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.2 m. x 0.5 m.
- xviii. Individual floors shall be prominently indicated on the wall facing the staircase.
- xix. In case of single staircase it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. However, the second staircase may lead to basement levels provided the same is separated at ground level either by ventilated lobby with discharge points at two different ends through enclosures.

K. Fire Escapes or External Stairs:

- i. Fire escape shall not be taken into account while calculating the number of staircases for a building.
- ii. All fire escapes shall be directly connected to the ground.
- iii. Entrance to the fire escape shall be separate and remote from internal staircase.
- iv. The route to fire escape shall be free of obstructions at all times except the doorway leading to the fire escape which shall have the required fire resistance.
- v. Fire escape shall be constructed of non-combustible materials.
- vi. Fire escape stairs shall have straight flight not less than 125 cm. wide with 25 cm. treads and risers not more than 19 cm.
- vii. Handrails shall be at a height not less than 1m.
- viii. Fire escape staircase in the mercantile, business, assembly, hotel buildings above 24 m. height shall be a fire tower and in such a case width of the same shall not be less than the width of the main staircase. No combustible material shall be allowed in the fire tower.

L. Spiral Stairs

- i. The use of spiral staircase shall be limited to low occupant load and to a building height 9 m.
- ii. A spiral stair shall not be less than 1.5 m in diameter and shall be designed to give the adequate headroom.

M. Staircase Enclosures

- i. The external enclosing walls of the staircase shall be of the brick or the R.C.C. construction having fire resistance of not less than two hours. All enclosed staircases shall have access through self-closing door of one-hour fire resistance. These shall be single swing doors opening in the direction of the escape. The door shall be fitted with the check action door closers.
- ii. The staircase enclosures on the external wall of the building shall be ventilated to the atmosphere at each landing.
- iii. Permanent vent at the top equal to the 5% of the cross sectional area of the enclosure and openable sashes at each floor level with area equal to 1 to 15% of the cross sectional area of the enclosure on external shall be provided. The roof of the shaft shall be at least 1 m. above the surrounding roof. There shall be no glazing or the glass bricks in any internal closing wall of staircase. If the staircase is in the core of the building and cannot be ventilated at each landing, a positive of 5 mm. w.g. by an electrically operated blower/blowers shall be maintained.
- iv. The mechanism for pressurizing the staircase shaft shall be so installed that the same shall operate automatically on fire alarm system/ sprinkler system and be provided with manual operation facilities.

N. Ramps

- i. Ramps of slope of not more than 1 in 10 may be substituted for and shall comply with all the applicable requirements of all required stairways as to enclosure capacity and limiting dimensions. Larger slopes shall be provided for special uses but in no case greater than 1 in 8. For all slopes exceeding 1 in 10 and where the use is such as to involve danger of slipping, the ramp shall be surfaced with approved non-slipping material.
- ii. The minimum width of the ramps in the Hospitals shall be 2.4 m. and in the basement using car parking shall be 6.0 m.
- iii. Handrails shall be provided on both sides of the ramp.
- iv. Ramp shall lead directly to outside open space at ground level or courtyards of safe place.
- v. For building above 24.0 m. in height access to ramps from any floor of the building shall be through smoke fire check door.
- vi. In case of nursing homes, hospitals etc. area exceeding 300 Sq m. at each floor one of the exit facility shall be a ramp of not less than 2.4 m. in width.

(10) Provision of Lifts

- A. Provision of the lifts shall be made for all multi-storeyed building having a height of 15.0 m. and above.
- B. All the floors shall be accessible 24 hrs. by the lift. The lift provided in the buildings shall not be considered as a means of escape in case of emergency.
- C. Grounding switch at ground floor level to enable the fire service to ground the lift car in case of emergency shall also be provided.
- D. The lift machine room shall be separate and no other machinery shall be installed in it.

i. Lift Enclosure/ Lift

General requirements shall be as follows

- a. Walls of lift enclosures shall have a fire rating of two hours. Lift shafts shall have a vent at the top of area not less than 0.2 Sq m.
- b. Lift motor room shall be located preferably on top of the shaft and separated from the shaft by the floor of the room.
- c. Landing door in lift enclosures shall have a fire resistance of not less than one hour.
- d. The number of lifts in one lift bank shall not exceed four. A wall of two hours fire rating shall separate individual shafts in a bank.
- e. Lift car door shall have a fire resistance rating of 1 hour.
- f. For buildings 15.0 m. and above in height, collapsible gates shall not be permitted for lifts and solid doors with fire resistance of at least one hour shall be provided.
- g. If the lift shaft and lobby is in the core of the building a positive pressure between 25 and 30 pa shall be maintained in the lobby and a possible pressure of 50 pa shall be maintained in the lift shaft. The mechanism for the pressurization shall act automatically with the fire alarm/sprinkler system and it shall be possible to operate this mechanically also.
- h. Exit from the lift lobby, if located in the core of the building, shall be through a self-closing fire smoke check door of one-hour fire resistance.
- i. Lift shall not normally communicate with the basement. If, however, lifts are in communication, the lift lobby of the basement shall be pressurized as in (g) with self, closing door as in (h).
- j. Grounding switch (es), at ground floor level shall be provided to enable the fire service to ground the lifts.
- k. Telephone/talk back communication facilities may be provided in lift cars for communication system and lifts shall be connected to the fire control room of the building.

- l. Suitable arrangements such as providing slope in the floor of the lift lobby shall be made to prevent water used during fire fighting, etc at any landing from entering the lift shafts.
- m. A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the location of the stairways. Floor marking shall be done at each floor on the wall in front of the lift-landing door.
- n. Alternate power supply shall be provided in all the lifts.

ii. Fire Lift

Following requirements shall apply for a fire lift in addition to above requirements:

- a. To enable fire service personnel to reach the upper floors with the minimum delay, one or more of the lifts shall be so designed so as to be available for the exclusive use of the fireman in an emergency and be directly accessible to every dwelling/ lettable floor space on each floor.
- b. The lift shall have a floor area of not less than 1.4 Sq.mt. It shall have a loading capacity of not less than 545 Kg. (8 persons lift) with automatic closing doors.
- c. The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, i.e. within a lift shaft. Lights and fans in the elevator having wooden paneling or sheet steel construction shall be operated on 24-volt supply.
- d. In case of failure of normal electric supply, it shall automatically switchover to the alternate supply. For apartment houses, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift should be so wired that in case of power failure, it comes down at the ground level and comes to stand still with door open.
- e. The operation of a fire lift shall be by a single toggle of two-button switch situated in a glass-fronted box adjacent to the lift at the entrance level. When the switch is on landing; call points will become inoperative and the lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.
- f. The words 'FIRE LIFT' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- g. The speed of the fire lift shall be such that it can reach to the top floor from ground level within one minute.

(11) Basement

As provided in the Regulations

A. Requirements

- i. The access to the basement shall be either from the main or alternate staircase providing access and exit from higher floors. Where the staircase is continuous, the same shall be enclosed type serving as a fire separation from the basement floor and higher floors. Open ramps shall be permitted, if they are constructed within the building line subject to the provision of the (iv).
- ii. In case of basement for office, sufficient number of exit ways and access ways shall be provided with a travel distance not more than 15.0 m. The travel distance in case of dead-end shall be 7.5 m.
- iii. The basement shall be partitioned and in no case compartment shall be more than 500 Sq m. and less than 50 Sq m. area except parking. Each compartment shall have ventilation standards as laid down in Bye-Laws separately and independently. The partition shall be made in consultation with Chief Fire Officer.
- iv. The first basement (immediately below ground level) can be used for services/parking/other permissible services. Lower basement, if provided, shall exclusively be used for car parking only.
- v. Each basement shall be separately ventilated. Vents with cross-sectional area (aggregate) not less than 2.5 percent of the floor area spread evenly round the perimeter of the basement shall be provided in the form of grills or breakable starboard lights or pavement lights or by way of shafts. Alternatively a system of air inlets shall be provided at basement floor level and smoke outlets at basement ceiling level. Inlets and extracts may be terminated at ground level with starboard or pavement lights. Ducts to convey fresh air to the basement floor level are to be laid. Starboard and pavement lights should be in positions easily accessible to the firemen and clearly marked "SMOKE OUTLET" or "AIR INLET" with an indication of area served at or near the opening.
- vi. The staircase of basement shall be of enclosed type having fire resistance of not less than two hours and shall be situated at the periphery of the basement to be entered at ground level only from the open air and in such positions that smoke from any fire in the basement shall not obstruct any exit serving the ground and upper stories of the building and shall communicate with basement through a lobby provided with fire resisting self-closing door of one hour rating. In case

of basement being used as car parking only, the travel distance shall be 45 m.

- vii. In multi-storeyed basements, intake duct may serve all basements levels, but each basement and basement compartment shall have separate smoke outlet duct or ducts. Mechanical extractors for smoke venting system from lower basement levels shall also be provided. The system shall be of such design as to operate on actuation of smoke, heat sensitive detectors/sprinklers, if installed, and shall have a considerably superior performance compared to the standard units. It shall also have an arrangement to start manually.
- viii. Mechanical extractors shall have an internal locking arrangement so that extractors shall continue to operate and supply fans shall stop automatically with the actuation of fire detectors. Mechanical extractors shall be designed to permit 30 air changes per hour in case of fire or distress call. However, for normal operation, only 30 air changes or any other convenient factor can be maintained.
- ix. Mechanical extractors shall have an alternate source of power supply.
- x. Ventilating ducts shall be integrated with the structure and made out of brick masonry or RCC as far as possible and when this duct crosses the transformer area of electrical switchboard, fire dampers shall be provided.
- xi. Kitchens working on gas fuel shall not be permitted in basement/sub-basement.
- xii. If cutouts are provided from basement to the upper floors or to the atmosphere, all side cutout openings in the basements shall be protected by sprinkler heads at closed spacing so as to form a water curtain in the event of a fire.
- xiii. Dewatering pump shall be provided in all basements.

(12) Provision of Helipad

All high-rise buildings 50 m. and above shall have provision for a Helipad on the terrace. The same shall be approved by the Authority.

(13) Service Ducts/Refuge Chute

- A. Service duct shall be enclosed by walls and door, if any, of 2 hours fire rating. If ducts are larger than 10 Sq m., the floor should seal them, but suitable opening for the pipes to pass through shall be provided with the gaps sealed.
- B. A vent opening at the top of the service shaft shall be provided between one-fourth and one-half of the area of the shaft. Refuge chutes shall have an outlet at least of wall of non-combustible material with fire resistance of not less than two hours. They shall not be located within the staircase enclosure or service shafts or air-conditioning shafts.

Inspection panel and door shall be tight fitting with 1 hour fire resistance; the chutes should be as far away as possible from exits.

- C. Refuge chutes shall not be provided in staircase walls and A/C shafts etc.

(14) Electrical Services

Electrical Services shall conform to the following :

- A. The electric distribution cables/wiring shall be laid in a separate duct shall be sealed at every floor with non-combustible material having the same fire resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits.
- B. Water mains, telephone wires, inter-com lines, gas pipes or any other service lines shall not be laid in ducts for electric cables.
- C. Separate conduits for water pumps, lifts, staircases and corridor lighting and blowers for pressuring system shall be directly from the main switch panel and these circuits shall be laid in separate conduit pipes, so that fire in one circuit will not affect the others. Master switches controlling essential service circuits shall be clearly labeled.
- D. The inspection panel doors and any other opening in the shaft shall be provided with airtight fire doors having fire resistance of not less than 1 hour.
- E. Medium and low voltage wiring running in shafts, and within false ceiling shall run in metal conduits. Any 240 voltage wiring for lighting or other services, above false ceiling should have 660V grade insulation. The false ceiling including all fixtures used for its suspension shall be of non-combustible material.
- F. An independent and well-ventilated service room shall be provided on the ground floor with direct access from outside or from the corridor for the purpose of termination of electrical supply from the licenses service and alternative supply cables. The doors provided for the service room shall have fire resistance of not less than 1 hour
- G. MCB and ELCB shall be provided for electrical circuit.

(15) Staircase And Corridor Lights

The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that it could be operated by one switch installation on the ground floor easily accessible to fire fighting staff at any time irrespective of the position of the individual control of the light points, if any. It should be of miniature circuit breaker type of switch so as to avoid replacement of fuse in case of emergency.

- A. Staircase and corridor lighting shall also be connected to alternate source of power supply.
- B. Suitable arrangement shall be made by installing double throw switches to ensure that the lighting installed in the staircase and the

corridor does not get connected to two sources of supply simultaneously. Double throw switch shall be installed in the service room for terminating the stand by supply.

C. Emergency lights shall be provided in the staircase and corridor.

(16) A. Air-conditioning

- i. Air- conditioning system should be installed and maintained so as to minimise the danger of spread of fire, smoke or fumes thereby from one floor of fire area to another or from outside into any occupied building or structure.
- ii. Air -conditioning systems circulating air to more than one floor area should be provided with dampers designed to close automatically in case of fire and thereby prevent spread of fire or smoke. Such a system should also be provided with automatic controls to stop fans in case of fire, unless arranged to remove smoke from a fire, in which case these should be designed to remain in operation.
- iii. Air- conditioning system serving large places of assembly (over one thousand persons), large departmental stores, or hostels with over 100 rooms in a single block should be provided with effective means for preventing circulation of smoke through the system in the case of fire in air filters or from other sources drawn into the system even though there is insufficient heat to actuate heat smoke sensitive devices controlling fans or dampers. Such means shall consist of approved effective smoke sensitive controls.

B. Air- conditioning should conform to the following:

- i. Escape routes like staircase, common corridors, lift lobbies; etc. should not be used as return air passage.
- ii. The ducting should be constructed of metal in accordance with BIS 655:1963
- iii. Wherever the ducts pass through fire walls or floor, the opening around the ducts should be sealed with fire resisting material of same rating as of walls / floors.
- iv. Metallic ducts should be used even for the return air instead of space above the false ceiling.
- v. The material used for insulating the duct system (inside or outside) should be of flame resistant (IS 4355: 1977) and non- conductor of heat.
- vi. Area more than 750 Sq m. on individual floor should be segregated by a firewall and automatic fire dampers for isolation should be provided.
- vii. In case of more than one floor, arrangement by way of automatic fire dampers for isolating the ducting at every floor from the floor should be made. Where plenums used for return air passage, ceiling and its features and air filters of the air handling units, these should be flame resistant. Inspection panels should be provided in the main trenching.

No combustible material should be fixed nearer than 15 cm. to any duct unless such ducting is properly enclosed and protected with flame resistant material

- viii. In case of buildings more than 24 m. in height in non-ventilated lobbies, corridors, smoke extraction shaft should be provided.

C. Fire Dampers

- i. These shall be located in air ducts and return air ducts/passages at the following points :—
 - a. At the fire separation wall.
 - b. Where ducts/passages enter the central vertical shaft.
 - c. Where the ducts pass through floors.
 - d. At the inlet of supply air duct and the return air duct of each compartment on every floor.
- ii. The dampers shall operate automatically and shall simultaneously switch off the air- handling fans. Manual operation facilities shall also be provided.
- iii. For blowers, where extraction system and dust accumulators are used, dampers shall be provided.
- iv. Fire/smoke dampers (for smoke extraction shafts) for buildings more than 24 m. in height. For apartment houses in non-ventilated lobbies /corridor operated by detection system and manual control sprinkler system. For other buildings on operation of smoke/ heat detection system and manual control/sprinkler system.
- v. Automatic fire dampers shall be so arranged so as to close by gravity in the direction of air movement and to remain tightly closed on operation of a fusible link

(17) Boiler Room

Provisions of boiler and boiler rooms shall conform to Indian Boiler Act. Further, the following additional aspects may be taken into account in the location of boiler/ boiler room :—

- A. The boiler shall not be allowed in sub-basement, but may be allowed in the basement away from the escape routes.
- B. The boilers shall be installed in a fire resisting room of 4 hours fire resistance rating, and this room shall be situated on the periphery of the basement. Catch pits shall be provided at the low level.
- C. Entry to this room shall be provided with a composite door of 2 hours fire resistance.
- D. The boiler room shall be provided with fresh air inlets and smoke exhaust directly to the atmosphere.
- E. The furnace oil tank for the boiler, if located in the adjoining room shall be separated by fire resisting wall of 4 hours rating. The entrance to this room shall be provided with double composite doors. A curb of

suitable height shall be provided at the entrance in order to prevent the flow of oil into boiler room in case of tank rupture.

F. Foam inlets shall be provided on the external walls of the building near the ground level to enable the fire services to use foam in case of fire.

(18) Alternate Source of Electric Supply

A stand by electric generator shall be installed to supply power to staircase and corridor lighting circuits, lifts detection system, fire pumps, pressurization fans and blowers, P. A system, exit sign, smoke extraction system in case of failure of normal electric supply. The generator shall be capable of taking starting current of all the machines and circuits stated above simultaneously.

If the standby pump is driven by diesel engine, the generator supply need not be connected to the standby pump. The generator shall be automatic in operation.

(19) A. Safety Measures In Electric Sub-Station

- i. Clear independent approach to the Sub-station from outside the building shall be made available round the clock
- ii. The approaches/corridors to the Sub-station area shall be kept clear for movement of men and material at all times.
- iii. The Sub-station space is required to be provided with proper internal lighting arrangements.
- iv. In addition to natural ventilation, proper ventilation to the Sub-station area is to be provided by grill shutters and exhaust fans at suitable places so as to discharge all smoke from the Sub-station without delay in case of fire so that sub-station operations can be carried out expeditiously.
- v. Cable trenches of 0.6 m. X 0.6 m. dummy floor of 0.6 mt. depth shall be provided to facilitate laying of cable inside the building for connecting to the equipment.
- vi. Steel shutters of 2.5 m. x 2.5 m with suitable grills shall be provided for transformers and Sub-station room.
- vii. The floor of the Sub-station should be capable of carrying 10 tons of transformer weight on wheels.
- viii. Built up Sub-station space is to be provided free of cost.
- ix. Sub-station space should be clear from any water, sewer, air-conditioning, and gas pipe or telephone services. No other service should pass through the substation space or the cable trenches.
- x. Proper ramp with suitable slope may be provided for loading and unloading of the equipment and proper approach shall be provided.

- xi. RCC pipes at suitable places as required shall be provided for the cable entries to the Sub-station space and making suitable arrangement for non-ingress of water through these pipes.
- xii. The Sub-station space is to be provided in the approved/sanctioned covered area of the building.
- xiii. Any other alteration/modification required while erection of the equipment will be made by the Owner / Builder at site as per requirement.
- xiv. Adequate arrangement for fixing chain pulley block above the fixing be available for load of 15 tons.
- xv. Provision shall be kept for the sumps so as to accommodate complete volume of transformer oil, which can spillover in the event of explosion of the transformer in the basement of the building. Sufficient arrangement should exist to avoid fire in the Sub-station building from spread of the oil from the sumps.
- xvi. Arrangement shall be made for the provision of fire retardent cables so as to avoid chances of spread of fire in the sub-station building.
- xvii. Sufficient pumping arrangement should exist for pumping the water out, in case of fire so as to ensure minimum loss to the switchgear and transformer.
- xviii. No combustible material shall be stacked inside the Sub-station premises or in the vicinity to avoid chances of fire.
- xix. It should be made mandatory that the promoters of the multi-storeyed building should get Sub-station premises inspected once a year to get their licence revalidated for the provision of electric supply from Electricity Board so that suitable action can be taken against the Owner / Builder in case of non- implementation.
- xx. The Sub-station must not be located below the 1st basement and above the ground floor.
- xxi. The Sub-station space should be totally segregated from the other areas of the basement by fire resisting wall. The ramp should have a slope of 1 : 10 with entry from ground level. The entire Sub-station space including the entrance at ground floor be handed over to the licensee of electricity free of cost and rent.
- xxii. The Sub-station area shall have a clear height of 3.6 m. below beams. Further, the Sub-station area will have level above the rest of basement level by 0.60 m.
- xxiii. It is to be ensured that the Sub-station area is free of seepage / leakage of water.
- xxiv. The licensee of electricity will have the power to disconnect the supply of the building in case of violation of any of the above points.
- xxv. Electric Sub-station enclosure must be completely segregated with 4-hours fire rating wall from remaining part of basement.
- xxvi. The Sub-station should be located on periphery /sub-basement and (not above ground floor).

- xxvii. Additional exit shall be provided if travel distance from farthest corner to ramp is more than 15 m.
- xxviii. Perfect independent vent system @ 30 air changes per hour linked with detection as well as automatic high velocity water spray system shall be provided.
- xxix. All the transformers shall be protected with high velocity water spray system / Nitrogen Injection System, Carbon Dioxide total flooding system in case of oil filled transformer. In addition to this, manual control of auto high velocity spray system for individual transformers shall be located outside the building at ground floor.
- xxx. Suitable arrangement for pump house, water storage tanks with main electrical pump and a diesel-operated pump shall be made if no such arrangement is provided in the building. In case the water pumping facilities are existing in the building for sprinkler system, the same should however be utilized for high velocity water spray system. Alternatively automatic CO2 total flooding system shall be provided with manual controls outside the electric substation.
- xxxi. System shall have facility to give an audio alarm in the basement as well as at the control room.
- xxxii. Fire control room shall be manned round the clock.
- xxxiii. The electric substation shall have electric supply from alternate source for operation of vent system lighting arrangements.
- xxxiv. Cable trenches shall be filled with sand
- xxxv. Party walls shall be provided between two transformers as per the rules.
- xxxvi. Electric control panels shall be segregated.
- xxxvii. Exits from basement electric substation shall have self-closing fire smoke check doors of 2 hours fire rating near entry to ramp.
- xxxviii. All openings to lower basement or to ground floor shall be sealed properly.
- xxxix. Yearly inspection shall be carried out by electrical load sanctioning authority.
 - xl. Ramp to be designed in a manner that in case of fire no smoke should enter the main building.
 - xli. Electric substation transformer shall have clearance on all sides as per BBL/relevant electric rules.
 - xl. Other facility shall be as per Building Bye-laws and relevant electric rules.
 - xl. Rising electrical mains shall consist of metal bus bars suitably protected from safety point of view.
- xliv. Dry transformer shall be preferred.

(20) Fire Protection Requirements

Buildings shall be planned, designed and constructed to ensure fire safety and this shall be done in accordance with Part-IV Fire and Life Safety of National Building Code of India, 2005 unless otherwise specified. In the

case of identified buildings the building schemes shall also be cleared by the Chief Fire Officer.

A. First Aid /Fixed Fire Fighting /Fire Detection Systems And Other Facilities

Provision of fire safety arrangement for different occupancy as indicated below shall be as per NBO code.

- i. Access
- ii. Wet Riser
- iii. Down Comer
- iv. Hose Reel
- v. Automatic Sprinkler System
- vi. Yard Hydrant
- vii. U.G. Tank with Draw off Connection
- viii. Terrace Tanks
- ix. Fire Pump
- x. Terrace Pump
- xi. First Aid Fire Fighting Appliances
- xii. Auto Detection System
- xiii. Manual operated Electrical Fire Alarm System
- xiv. P.A System with talk back facility
- xv. Emergency Light
- xvi. Auto D.G. Set
- xvii. Illuminated Exit Sign
- xviii. Means of Escape
- xix. Compartmentation
- xx. MCB /ELCB
- xxi. Fire Man Switch in Lift
- xxii. Hose Boxes with Delivery Hoses and Branch
- xxiii. Pipes Refuge Area

NOTE :

1. Where more than one riser is required because of large floor area, the quantity of water and pump capacity recommended should be finalized in consultation with Chief Fire Officer.
2. The above quantities of water shall be exclusively for fire fighting and shall not be utilized for domestic or other use.
3. A facility to boost up water pressure in the riser directly from the mobile pump shall be provided in the wet riser, down comer system with suitable fire service inlets (collecting head) with 2 to 4 numbers of 63 mm inlets for 100-200 mm dia main, with check valve and a gate valve.
4. Internal diameter of rubber hose for reel shall be minimum 20 mm. A shut off branch with nozzle of 5 mm. size shall be provided.
5. Fire pumps shall have positive suction. The pump house shall be adequately ventilated by using normal/mechanical means. A clear space of 1.0 m. shall be kept in between the pumps and enclosure for easy movement /maintenance. Proper testing facilities and control panel etc. shall be provided.
6. Unless otherwise specified in Regulations, the fire fighting equipments /installation shall conform to relevant BIS Specifications.
7. In case of mixed occupancy, the fire fighting arrangement shall be made as per the highest class of occupancy.

8. Requirement of water based first aid fire extinguishers shall be reduced to half if hose reel is provided in the Building.

(21) Static Water Storage Tank

- A. A satisfactory supply of water exclusively for the purpose of fire fighting shall always be available in the form of underground static storage tank with specified capacity with arrangements of replenishment by town's main or alternative source of supply @ 1000 liters per minute. The static storage water supply required for the above mentioned purpose should entirely be accessible to the fire tenders of the local fire service. Provision of suitable number of manholes shall be made available for inspection repairs and insertion of suction hose etc. The covering slab shall be able to withstand the vehicular load of 45 tonnes in case of high rise and 22 tonnes in case of low rise buildings. A draw off connection shall be provided. The slab need not strengthened if the static tank is not located in mandatory set-back area.
- B. To prevent stagnation of water in the static water tank, the suction tank of the domestic water supply shall be fed only through an over-flow arrangement to maintain the level therein at the minimum specified capacity.
- C. The static water storage tank shall be provided with a fire brigade collecting branching with 4 Nos. 63mm dia instantaneous male inlets arranged in a valve box with a suitable fixed pipe not less than 15 cm dia to discharge water into the tank. This arrangement is not required where down comer is provided.

(22) Automatic Sprinklers

Automatic sprinkler system shall be installed in the following buildings:

- A. All buildings of 24 m. and above in height, except group housing and 45 m. and above in case of apartment /group housing society building.
- B. Hotels below 15 m. in height and above 1000 sq. m. built up area at each floor and or if basement is existing.
- C. All hotels, mercantile, and institutional buildings of 15 m. and above.
- D. Mercantile building having basement more than one floor but below 15 m. (floor area not exceeding 750 sq. m.)
- E. Underground Shopping Complex.
- F. Underground car / scooter parking /enclosed car parking.
- G. Basement area 200 sq. m. and above.
- H. Any special hazards where the Chief Fire Officer considers it necessary.
- I. For buildings up to 24 m. in height where automatic sprinkler system is not mandatory as per these Bye-laws, if provided with sprinkler installation following relaxation may be considered.

- i. Automatic heat/smoke detection system and M.C.P. need not be insisted upon.
- ii. The number of Fire Extinguisher required shall be reduced by half.

(23) Fixed Carbon Di-Oxide / Foam / DCO Water Spray Extinguishing System

Fixed extinguishing installations shall be provided as per the relevant specifications in the premises where use of above extinguishing media is considered necessary by the Chief Fire Officer.

(24) Fire Alarm System

All buildings of 15 m. and above in height shall be equipped with fire alarm system, and also residential buildings (Dwelling House, Boarding House and Hostels) above 24 m. height.

- A. All residential buildings like dwelling houses (including flats) boarding houses and hostels shall be equipped with manually operated electrical fire alarm system with one or more call boxes located at each floor. The location of the call boxes shall be decided after taking into consideration their floor area without having to travel more than 22.5 m.
- B. The call boxes shall be of the break glass type without any moving parts, where the call is transmitted automatically to the control room without any other action on the part of the person operating the call boxes.
- C. All call boxes shall be wired in a closed circuit to a control panel in a control room, located as per Bye-laws so that the floor number from where the call box is actuated is clearly indicated on the control panel. The circuit shall also include one or more batteries with a capacity of 48 hours normal working at full load. The battery shall be arranged to be a continuously trickle charged from the electric mains.
- D. The call boxes shall be arranged to sound one or more sounders so as to ensure that all occupants of the floor shall be warned whenever any call box is actuated.
- E. The call boxes shall be so installed that they do not obstruct the exit ways and yet their location can easily be noticed from either direction. The base of the call box shall be at a height of 1.5 m. from the floor level.
- F. All buildings other than as indicated above shall, in addition to the manually operated electrical fire alarm system, be equipped with an automatic fire alarm system.
- G. Automatic detection system shall be installed in accordance with the relevant standard specifications. In buildings where automatic sprinkler system is provided, the automatic detection system may not be insisted upon unless decided otherwise by the Chief Fire Officer.

NOTE : Several type of fire detectors are available in the market but the application of each type is limited and has to be carefully considered in relation to the type of risk and the structural features of the building where they are to be installed.

(25) Control Room

There shall be a control room on the entrance floor of the building with communication system (suitable public address system) for all floors and facilities for receiving the message from different floors. Details of all floor plans along with the details of fire fighting equipment and installation shall be maintained in the Control Room. The Control Room shall also have facility to detect the fire on any floor through indicator boards connecting fire detection and alarm system on all floors. The staff in charge of the Control Room shall be responsible for the maintenance of the various services and fire fighting equipment and installation. The Control Room shall be manned round the clock by trained fire fighting staff.

(26) Fire Drills and Fire Orders

The guidelines for fire drill and evacuation etc. for high-rise building shall be as per Part-IV of National Building Code. All such building shall prepare the fire orders duly approved by the Chief Fire Officer.

(27) A qualified fire officer and trained staff shall be appointed for the following buildings.

- A. All high rise buildings above 30 m. in height where covered area of one floor exceeds 1000 sq. m. except apartments / group housing.
- B. All hotels, identified under classification three star and above category by Tourism Department and all hotels above 15 m. in height with 150 bed capacity or more without star category.
- C. All hospital building of 15 m. and above or having number of beds exceeding 100.
- D. Underground shopping complex where covered area exceeds 1000 sq. m.
- E. All high hazard industries.
- F. Any other risk which Chief Fire Officer considers necessary.

(28) The lightening protection warning light (red) for high-rise buildings shall be provided in accordance with the relevant standard. The same shall be checked by electrical department.

(29) Material used for Construction of Building

- A. Combustible/flammable material shall not be used for partitioning, wall paneling, false ceiling etc. Any material giving out toxic gases/ smoke if involved in the fire shall not be used for partitioning of a floor or wall paneling or a false ceiling etc. The surface frames spread of

the lining material shall conform to class-I of the standard specification. The framework of the entire false ceiling shall be provided with metallic sections and no wooden framework shall be allowed for paneling/false ceiling.

B. Construction features/elements of structures shall conform to National Building Code 2005 and BIS codes

(30) LPG

The use of LPG shall not be permitted in the high-rise building except residential/hotel/hostel/kitchen/pantry (if any) and shall be located at the periphery of the building on the ground level.

(31) Housekeeping

A high standard of house keeping shall be insisted upon by all concerned. There must be no laxity in this respect. It must be borne in mind that fire safety is dependent to a large extent upon good housekeeping.

A. Good Housekeeping includes the following :—

- i. Maintaining the entire premises in neat and clean condition.
- ii. Ensuring that rubbish and combustible material are not thrown about or allowed to accumulate, even in small quantity, in any portion of the building. Particular attention must be paid to corners and places hidden from view.
- iii. Providing metal receptacles/waste paper basket (of non-combustible material) at suitable locations for disposal of waste. Separate receptacles must be provided for disposal of cotton rags/waste, wherever it is generated, these must under no circumstances be left lying around in any portion of the building.
- iv. Ensuring that receptacles for waste are emptied at regular intervals and the waste removed immediately for safe disposal outside the building.
- v. Ensuring that all doors/fixtures are maintained in good repairs, particular attention must be paid to self-closing fire smoke check doors and automatic fire/doors/rolling shutters.
- vi. Ensuring that self-closing fire/smoke check doors close properly and that the doors are not wedged open.
- vii. Ensuring that the entire structure of the building is maintained in good repairs.
- viii. Ensuring that all electrical and mechanical service equipments are maintained in good working condition at all times.
- ix. Ensuring that Cars / Scooters etc. are parked systematically in neat rows. It is advisable to mark parking lines on the ground in the parking areas near the building and in the parking area on ground floor and in basement(s); as applicable, inside the building. A parking attendant must ensure that vehicles are parked in an orderly manner and that

the vehicles do not encroach upon the open space surrounding the building.

B. Smoking Restrictions

- i. Smoking shall be prohibited throughout the basement(s) and in all areas where there is a profusion of combustible materials. Easily readable "NO SMOKING" signs must be conspicuously posted at locations where they can catch the eye. Each sign must also include a pictograph. The sign may also be illuminated.
- ii. In all places where smoking is permitted, ashtrays half filled with water, must be placed on each table/at each other suitable locations for safe disposal of spent smoking material. The design of the ashtrays must be such that they cannot easily topple over. If, for any reason, this is not practicable a minimum of one metal bucket or other non-combustible container half filled with water must be provided in each compartment for disposal of spent smoking materials.

C. Limiting the Occupant Load in Parking and Other Areas of Basement

Where parking facility is provided in the basement(s) no person other than the floor-parking attendant may be allowed to enter and remain in the parking areas except for parking and removal of Cars/Scooters. Regular offices must not be maintained in the storage /parking area in the basement(s). The stores / godowns must be opened for the limited purpose for keeping or removing stores.

No person other than those on duty may be permitted in the air-conditioning plant room(s), HL/LT switch room, transformer compartment, control room pump house, generator room, stores and records etc.

(32) Fire Prevention

In addition to the measures recommended above, the following fire prevention measures must be implemented when the building is in occupation.

- i. Storage of flammable substances, such as diesel oil, gasoline, motor oils, etc. must not be allowed anywhere within the building. The only exception to this rule may be:
 - a. Storage of diesel oil in a properly installed tank in a fire-resisting compartment in the generator room;
 - b. Diesel oil, gasoline, motor oil etc, filled in the vehicle tanks.
- ii. Preparation of tea and warming of food must be prohibited throughout the building.
- iii. Where heaters are used during winters, the following precautions must be taken.

- a. All heaters, except convector heaters, must be fitted with guards.
 - b. Heaters must not be placed in direct contact with or too close to any combustible material.
 - c. Heaters must be kept away from curtains to ensure that the latter do not blow over the heater accidentally.
 - d. Heaters must not be left unattended while they are switched on.
 - e. Defective heaters must be immediately removed from service until they have been repaired and tested for satisfactory performance.
 - f. Use of heaters must be prohibited in the entire basement, fire control room and in all weather maker rooms throughout the building. Also in all places where there is profusion of combustible flammable materials.
- iv. Use of candles or other naked light flame must be forbidden throughout the building, except in the offices (for sealing letters only) and kitchen. When candles/ spirit lamps are used for sealing letters/packets, extreme care must be taken to ensure that paper does not come in direct contact with the naked flame and the candle/spirit lamp does not topple over accidentally while still lighted. All candles/spirit lamps kitchen fires must be extinguished when no longer required.
 - v. Fluorescent lights must not be directly above the open file racks in offices/record rooms. Where this is unavoidable, such lights must be switched on only for as long as they are needed.
 - vi. Filling up of old furniture and other combustible materials such as scrap paper, rags, etc. must not be permitted anywhere in the building. These must be promptly removed from the building.
 - vii. More than one portable electrical appliance must not be connected to any single electrical outlet.
 - viii. Used stencils, ink smeared combustible materials and empty ink tubes must not be allowed to accumulate in rooms/compartments where cyclostyling is done. These must be removed and disposed off regularly.
 - ix. All shutters/doors of main switch panels and compartments/shafts for electrical cables must be kept locked.
 - x. Aisles in record rooms and stores must have a clear uniform width of not less than 1.0 m. Racks must not be placed directly against the wall/partition.
 - xi. In record rooms, offices and stores, a clear space of not less than 30 cm. must be maintained between the top-most stack of stores/records and the lighting fittings.
 - xii. A similar clearance, and at (xi) above must be maintained from fire detectors.
 - xiii. Fire detectors must not be painted under any circumstances and must also be kept free from lime/distemper.
 - xiv. Records must not be piled/dumped on the floor.

- xv. Welding or use of blow torch shall not be permitted inside the building, except when it is done under strict supervision and in full conformity with the requirements laid down in IS: 3016-1966 code of practice for fire precautions in welding and cutting operation.
- xvi. Printing ink/oil must not be allowed to remain on the floor, the floor must be maintained in a clean condition at all times.

(33) Occupancy Restrictions

- A. The premises leased to any party shall be used strictly for the purpose for which they are leased.
- B. No dangerous trade/practices (including experimenting with dangerous chemicals) shall be carried on in the leased premises;
- C. No dangerous goods shall be stored within the leased premises.
- D. The common/public corridor shall be maintained free of obstructions, and the lessee shall not put up any fixtures that may obstruct the passage in the corridor and/or shall not keep any wares, furniture or other articles in the corridor.
- E. The penalty for contravention of the condition laid down below must be immediate termination of lease and removal of all offending materials.
- F. Regular inspection and checks must be carried out at frequent intervals to ensure compliance with conditions above.

PART – VIII

DEVELOPMENT AND SUBDIVISION OF LAND REGULATIONS

Application **75.** (1) Applications for subdivision of land for utilizing selling, leasing out or otherwise disposing it off as referred to in clause(a) of sub-section(1) of Section 16 shall be made to the Authority in Form-1.

(1) The applications for subdivision shall be accompanied by—

- i. a copy of the title deed of the land in question;
- ii. an affidavit with regard to legal ownership and possession of land and such other particulars as the Authority may require;
- iii. an authenticated copy of the certificate with regard to the payment of development charges, if any, under, Chapter-IX of the Act, provided that submission of such certificate shall not be necessary if the provisions of Chapter-IX of the said Act has not been brought into force in the area in which the concerned land is located;
- iv. an authenticated copy of the receipt towards payment of the scrutiny fee to the Authority as prescribed under Rule-18;
- v. a no-objection certificate ,from the lessor in case the land is not leasehold unless the lease deed permits undertaking subdivision as applied for;
- vi. a site plan traced out of revenue village settlement map in operation indicating therein in red colour the lands to which the application relates and surrounding plots;
- vii. an index plan of the site showing adjoining areas within a radius of 150 m. round from the proposed site marking clearly therein the boundaries of the proposed layout in red colour, existing road, structures, burial ground and high tension or low tension power line passing through the site of the layout plan and the level of the site;
- viii. a detailed plan to a scale not less than 1:100 showing the proposed layout (subdivision) indicating size of plot width of the proposed road, open space and amenities provided;
- ix. land use analysis indicating the survey plot number, the bye-plot number, the detailed dimensions of all the plots, the area of each plot and the use to which they are proposed to be put;

x. in case of land originally belonging to any religious endowments, a no-objection certificate from the Endowment Commissioner or Wakf Board as the case may be; and

- (3) Where permission for subdivision of land is granted, such permission shall be communicated to the applicant in Form II within 60 days from the receipt of the application.
- (4) Where permission for Subdivision of land is refused such refusal shall be communicated to the applicant in Form IX.

Use in relation to development plan.

76. (1) Subdivision of land shall normally be permitted for the purpose for which the concerned land is earmarked in the development plan. Such subdivision may be for residential, commercial, industrial, institutional or combination of one or more of this purpose or such other purposes as may be considered conforming to the provisions in the development plan :—

Provided that in every subdivision plan spaces for roads, community facilities and public utilities as specified in this part or such other facilities as the Authority may determine shall be incorporated.

- (2) After a subdivision plan has been approved the Authority shall not permit construction of a building on any of the plot under Section-16 unless the owners have laid down and made street or streets and provided amenities as approved or transferred the land covered by roads, open spaces or other public purposes to the concerned local body.
- (3) Subdivision of land for residential purpose in green-belt use zone shall not be permitted unless such subdivision in the opinion of the Authority forms a part of the normal expansion of existing human habitation.
- (4) The subdivision shall conform to the proposals of the C.D.P., 2030.

Size of the plot and road width.

77. (1) No subdivided plot will be less than 50 sq.m. However the Authority reserves the right to relax in special cases such as E.W.S. housing. The size of the plot shall be according to the relevant subdivision of plot size in the zones.

TABLE-36: MINIMUM ROAD WIDTHS FOR RESIDENTIAL SUBDIVISION

Sl.No.	Length of road (in m.)	Min. width of road
1	Up to 250	9.0
2	Above 250 up to 500	12.0
3	Above 500 to 1000	15.0

- For E.W.S. housing scheme, the minimum road width may be relaxed.

- | | |
|--------------------------------|--|
| Area for development. | 78. Apart from the provision for amenities, open spaces, the area for residential development shall be up to maximum of 50% of the total land area. |
| Parks and open spaces. | 79. Parks and open spaces shall not be less than 12—14% of the total land area. This shall be relinquished to the Authority and if required, the Authority may handover area over for maintenance to the residents' welfare association or owner or developer. If the site is not utilized for which it is leased out within a prescribed period, it will be resumed back to the Authority. |
| Civic amenities. | 80. Civic amenities space shall not be less than 6—8% of the total area. The site shall be relinquished to Authority and leased to the residents' welfare association or the developer on payment of necessary nominal fees as prescribed by the Authority from time to time. If the site is not utilized for which it is leased out within a prescribed period, it will be resumed back to the Authority. |
| Exemptions | 81. (1) In case of developable area for residential development is less than 50% by providing for Master Plan roads or any other road or due to statutory reasons, prescribed by the Authority in a lay out, the applicant may be exempted from complying with Civic amenities reservation.

(2) For lay out over 10.0 ha. commercial land uses such as business offices, shopping complexes and Retail up to 2-3% may be permitted, subject to provision of separate access. |
| Security for Subdivision plan. | 82. (1) The applicant shall deposit a refundable non-earning security deposit at the rate of Rs.100 per Sq. m. of plot area for development of land for a Plotted Development Scheme.

(2) The security deposits shall be refunded within 60 days from the date on which completion certificate is produced. If the development is not as per approved plan, this deposit shall be forfeited and the amount will be transferred to the local authority for development of the site.

(3) The security deposit will be refunded with 2% interest if the development is carried out as per the approved plan / lay out. |

PART - IX

COMPOUNDING

Restriction on
compounding.

83. (1) Any deviation pertaining to unauthorized development shall not be compounded—

- A. Where construction has been undertaken on Government land or land belonging to local body or land not owned by the person undertaking such development ;
- B. Where F.A.R. or height has been exceeded or front setback has been reduced from the prescribed norms under these regulations ;
- C. Where development has been undertaken unauthorizedly within the prohibited limits of any ancient or archaeological monuments;
- D. Where such developments interfere with the natural drainage of the locality ;
- E. Where development has been undertaken unauthorisedly over the area earmarked /approved for parking ; and
- F. Where road or drain whether public or private, whether constructed or natural, has been encroached ;

(2) Subject to the provisions contained in sub-Regulation (1), the Authority shall have the power to determine further such circumstances under which compounding may be prohibited ;

(3) The Authority may, either before or after the institution of the proceedings under the provisions of the Act compound any offence;

- A. Where development has been undertaken without permission, but within the framework of use restrictions and the provisions of these Regulations applicable to the concerned plot ;
- B. Where development has been undertaken in deviation of the approved plan, but within the framework of the use restriction and the provisions, norms, and stipulations of these regulations ; and
- C. (iii) The Authority may however compound deviations up to 10% (ten per cent) beyond the permissible norms of these Regulations in respect of coverage, rear and side setback only.

Compounding
Rate.

84. Compounding Rates for various categories shall be as follows :

TABLE 37 :—CATEGORYWISE COMPOUNDING RATES

Sl. No.	Situations	Compounding fee for Sq. m. (in Rs.)	
		Residential	Non-residential
1.	Where development has been undertaken without permission, but within the framework of use restrictions and the provisions of the Regulations applicable to concerned plot.	250	450
2.	Where development has been undertaken in deviation to the approved plan, but within the framework of use, restrictions and the provisions of norms and stipulations of these regulations.	125	250
3.	Constructions up to 10% beyond the permissible norms of these Regulations with respect to coverage, side and rear setback.	550	1100
Compounding amount.	<p>85. (1) The compounding amount shall be such as may be decided by the Authority with approval of the Government from time to time.</p> <p>(2) At least 50% of the compounding amount shall be utilized for development of public utility services and protection of heritage sites and structures.</p>		
Temporary retention.	<p>86. The Authority may allow retention of any unauthorized structure for temporary period on deposit of retention fee. The type of structure to be retained, the period of retention and the fees to be deposited shall be decided by the Authority from time to time.</p>		

PART X

SAVINGS / REPEALS AND INTERPRETATION

- Repeal and Savings. **87.** (1) The Bhubaneswar Development Authority (Planning and Building Standards) Regulations, 2001 are hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the said Regulations so repealed shall be deemed to have been done or taken under these Regulations, and those pending on the date of commencement of these Regulations, shall be done or taken under the provisions of these Regulations.
- (3) Where a plan had been approved in relaxation of the norms of earlier Regulations, through compounding or otherwise and subsequently new construction has been taken up without plan approval, or, where, permission for fresh construction is sought for, the stipulations of the present Regulation shall apply.
- Information Education and Communication. **88.** (1) The Authority shall take a pro-active role in educating the land owners within their jurisdiction so that (a) there will be a planned growth within development area and (b) demolition will be avoided.
- (2) A copy of these Regulations shall be printed by the Authority and sold to public in the sales counter of the Authority.
- Interim Development Plans. **89.** (1) The Authority may prepare Interim Development Plans (I.D.P.) for newly included development areas including stitiban/ ryoti land within a reasonable time frame so that development may not be held up in the name of pendency of Interim Development Plan. Where such I.D.P. has not been prepared, the general provisions of this Regulation shall apply without any zonal restrictions.
- (2) The Authority shall ensure that resources for land acquisition and cost of land are mobilised or are likely to be mobilised within the time frame projected for implementation of such Interim Development Plans.
- Provision of Development Plan to Prevail. **90.** In case any of the provisions of these regulations are at variance with those contained in any Development Plan or Town Planning Scheme, the provisions of such plan or scheme shall prevail.
- Applicability of National Building Code. **91.** Where no express provision has been made in respect of any matter connected with planning and building standards by the Act, the Rules, the Development Plan, the Town Planning Schemes, or these Regulations or by any resolution of the Authority, the provisions of the National Building Code of India, 2005 shall *mutatis mutandis* be applicable.

Schedules
and
Annexure.

92. (1) The qualification, experience and competence of technical personnel and builders are given in Schedule I, which are to be followed as per relevant regulations.

(2) The extract of ODA Act, 1982, ODA Rule, 1983 and relevant provisions of NBC are provided at Schedule 2 for ready reference.

(3) The forms prescribed for application under Section 16 (1), permission under Section 16(3) drawing attention of Vice-Chairman u/s 16(7) of ODA Act and others in connection with commencement of work, Completion Certificate, Occupancy Certificate, Structural Stability Certificate and periodic Progress Report are provided in Schedule 3.

Constitution
of D. P. and
B. P.
Committee.

93. (1) The Authority shall constitute a Committee under Section 6 of ODA Act to be called Development Plan and Building Permission Committee with members from the following Organizations/Department besides those required from B.D.A.

1. Vice-Chairman, B.D.A., Chairman
2. Commissioner, Bhubaneswar Municipal Corporation
3. Director, Town Planning, Orissa
4. Chief Architect, Orissa
5. Joint Secretary, Housing & Urban Development Deptt., Orissa
6. Chief Engineer, Public Health Engineering Deptt. Orissa
7. Joint Secretary, Environment and Forests Department, Orissa
8. Chief Fire Officer, Bhubaneswar
9. Director (Estates), G.A. Deptt., Orissa
10. Member-Secretary, Orissa State Pollution Control Board

Additional member(s) may be co-opted/ associated for specific meetings depending upon the purpose.

(2) The Authority may by notification delegate such powers relating to approval of Schemes, Projects and Building Plans to the Committee constituted under sub-Regulation (1) as it may deem appropriate.

(3) Matters and cases relating to permission under Section 16 of the ODA Act and such other matters including permission for multi storeyed buildings are required to be referred to the Committee from time to time for advice and recommendations.

(4) In order to facilitate clearance from different bodies / Departments of State Government with the concept of single window clearance approach and thereby final approval by the Authority within stipulated time frame, the Authority shall constitute a Building Approval Committee consisting of representatives of the organizations / bodies from whom clearance for development / building permit clearance is required for approval of plans coming up in Special Economic Zones, Group Housing , Multi-storeyed Buildings & other Special Buildings.

Activities
along National
highways.

94. While regulating activities along National Highway the provisions contained under the relevant rules and regulations are to be adhered to.

Decision of the
Government
to be Final.

95. In case of any dispute in interpretation of these regulations, the decision of the State Government shall be final.

KALUCHARAN SAHU

Secretary

Bhubaneswar Development Authority

SCHEDULES AND ANNEXURES

SCHEDULE 1

QUALIFICATION, EXPERIENCE & COMPETENCE OF TECHNICAL PERSONNEL AND BUILDER

1. ARCHITECT

(A) Qualification & Experience

The minimum qualification for an Architect shall be Degree in Architecture/ equivalent, registration with the Council of Architecture and not be in arrears of subscription.

(B) Competence

The Architect shall be competent to carry out the work related to the building permit as given below and shall be entitled to submit :—

- (i) All plans and information connected with the building permit except engineering services of multi-storeyed/special buildings given in 12.2.5.1 of NBC, 2005.
- (ii) Certificate of supervision and completion of all buildings pertaining to architectural aspects.
- (iii) Preparation of sub-division/layout plans and related information connected with development permit of area upto 2 hectare.
- (iv) Certificate of supervision for development of land of area up to 2 hectare.

(C) Duties & Responsabilités

- i) She/ He shall be responsible for making adequate arrangements to ensure not only that the work is executed as per the approved plans but also in conformity with the stipulations of the National Building Code, 2005 and the BIS standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code, 2005 in the buildings and shall obtain N.O.C. from the Chief Fire Officer or concerned Authority before applying for Occupation Certificate.

- (ii) He/She shall, on behalf of the owner, apply for the Progress Certificates Completion Certificates and the Occupancy Certificates and obtain the same as required under the regulations.

2. ENGINEER

(A) Qualification and Experience

The minimum qualification for an Engineer shall be Degree in Civil Engineering/ equivalent, registration with the Institution of Engineers, India and not be in arrears of subscription.

(B) Competence

The Licensed Engineers shall be competent to carry out the work related to the building permit as given below and shall be entitled to submit :—

- (i) All plans and information connected with building permit.
- (ii) Structural details and calculations of buildings on plot up to 500 square meters and up to five storeys excluding basement/stilt or below 15 meter in height.
- (iii) Certificate of supervision and completion for all buildings.
- (iv) Preparation of all service plans and related information.
- (v) Issuing Certificate of supervision for development of land for all area.

(C) Duties & Responsibilities

- (i) She/ He shall be responsible for making adequate per the approved plans but also is confirmation with the stipulations of the National Building Code, 2005 and the BIS standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code of India in the buildings and shall obtain N.O.C. from the Chief Fire Officer or concerned Authority before applying for Occupation Certificate.
- (ii) She or he shall, on behalf of the owner, apply for the Progress Certificates Completion Certificates and the Occupancy Certificates and obtain the same as required under the regulations.

(D) Registration

- (i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- (ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may black-list an Engineer in case of serious defaults or repeated defaults and shall inform the Institution of Engineers, India to take suitable action against such person. The registration shall be liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default.

3. STRUCTURAL ENGINEER

(A) Qualification & Experience

The minimum qualifications for a structural engineer shall be degree in Civil Engineering/ equivalent, registration with the Institution of Engineers, India and not be in arrears of subscription with minimum 2 years experience in Structural Engineering practice.

Note – The 2 years experience shall be relaxed to one year in the case of Post-Graduate degree in Structural Engineering/ higher qualification.

(B) Competence

The licensed Structural Engineers shall be competent to submit the structural details and calculations for all buildings and undertake supervision.

In case of buildings having special structural features, as decided by the Authority, which are within the horizontal areas and vertical limits specified in Chapter A-2.1.1(b), A-2.2.1(b) and A-2.4.1(a) of NBC 2005 they shall be designed only by structural engineers.

(C) Duties and Responsibilities

- (i) To prepare a report of the structural design.
- (ii) To prepare detailed structural design and to prescribe the method and technique of its execution strictly on the basis of the National Building Code or relevant BIS specifications.
- (iii) To prepare detailed structural drawings and specifications for execution indicating thereon, design live loads, safe soil bearing capacity, specifications of material, assumptions made in design, special precautions to be taken by contractor to suit the design assumptions etc. whatever applicable.
- (iv) To supply copies of structural drawings to the site supervisor.

- (v) To inspect the works at all important stages and certify that the work being executed is up to the satisfaction of the Architect.
- (vi) To certify the structural safety and overall structural soundness of the building to the Architect.
- (vii) To advise the Owner/Architect/Engineer for arranging for tests and their reports for soil, building material, etc. for his evaluation and design consideration.
- viii) To prepare the revised calculations & drawings in case of any revision with reference to the earlier submission of drawing and design in a particular case.
- (ix) To submit the Certificate of structural safety and over all structural soundness of building to Authority.
- (x) In case of multi-storeyed buildings and buildings of a special nature as identified by the Authority from time to time, the Structural Calculations/ Drawings shall be got vetted by Indian Institute of Technology/National Institute of Technology / Reputed Government Engineering College.

(D) Registration

- (i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- (ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may black-list a Structural Engineer in case of serious defaults or repeated defaults and shall inform the Institution of Engineers, India to take suitable action against such person. The registration shall be liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default

4. TOWN PLANNER

(A) Qualification & Experience

The minimum qualification for a Town Planner shall be recognized Post-Graduate Degree/Diploma in Town Planning/ Undergraduate Degree in Town Planning and registered membership of ITPI and not be in arrears of subscription.

(B) Competence

The licensed Town Planner shall be entitled to submit:

- (i) All plans and related information connected with development of land of all areas including integrated township.

- (li) Certificate of supervision for development of land of all areas.

(C) Duties and Responsibilities

- (e) He/She be responsible for making adequate arrangements to ensure not only that the work is executed as per the approved plans but also is conformity with the stipulations of the National Building Code, 2005 and the BIS Standards for safe and sound construction non-hazardous, functioning of the services incorporated in the building and for making adequate provisions for services and equipment for protection from the fire hazards as per the stipulations of the National Building Code of India, 2005.

(D) Registration

- (i) The registration fee if any shall be payable as prescribed by the Authority from time to time.
- (ii) The Authority may black-list a Town Planner in case of serious defaults or repeated defaults and shall inform the Institute of Town Planners, India. The registration shall be liable to be revoked temporarily or permanently by the Authority in such case of negligence or default.

5. SUPERVISOR

(A) Qualification and Experience

The minimum qualifications for a supervisor shall be recognized Diploma in Civil Engineering or Architectural Assistantship, plus 5 years experience in building design, construction and supervision.

(B) Competence

The licensed Supervisor shall be entitled to submit:

- (i) All plans and related information connected with building permit for residential buildings on plot up to 100 sq. m. and up to two storeys.
- (ii) Certificate of supervision for buildings as per (i).

(C) Duties and Responsibilities

- (i) To adhere strictly to the architectural and structural drawings/ specifications and written instructions of the structural Engineer and Architect/ Engineer.
- (ii) To follow the provisions of NBC, 2005 or BIS Specifications as regards materials, components, quality control and the process of construction.

- (iii) To bring to the notice of the structural Engineer and Architect/Engineer/ any situation or circumstances which in his opinion are liable to endanger the safety of structure.
- (iv) To deposit with the Authority one set of working drawings of the works executed along with the progress certificates before proceeding to the next stage of the work.
- (v) He shall be in charge of site and responsible for supervision of the work.
- (vi) He shall ensure that all the works under his charge are carried out in conformity with the approved drawings and as per the details and specifications supplied by the Architect/Engineer.
- (vii) He shall take adequate measures to ensure that no damage is caused to the work under construction and the adjoining properties.
- (viii) He shall also ensure that no undue inconvenience is caused in the course of his work in the people in neighbourhood.

(D) Registration

- (i) The registration fees if any shall be payable as prescribed by the Authority from time to time.
- (ii) If he/she is found negligent in his/her duties and responsibilities. The Authority may blacklist supervisor in case of serious defaults or repeated defaults. The registration shall be liable to be revoked temporarily or permanently by the Authority in such cases of negligence and default

6. GROUP AGENCY

When any Group or Agency comprising of qualified Architect/ Engineer/ Town Planner is practicing, then the qualifications and experience, competence, duties and responsibilities and registration will be the combination of individual qualification and experience, competence, duties and responsibilities and registration as provided in Schedule 1 to 5.

7. BUILDER

(A) Qualification and experience

- (a) The person/ firm engaged in construction activities/ building activities in an urban area having proven merit and experience may be considered for registration as a builder. He/ she should have at least five years experience in the line.

- (b) A person or group of persons having a qualification of Civil Engineering, Architecture and Town Planning may be registered as builder.
- (c) The Authority may classify the builders into three classes namely, Class-A, Class-B and Class-C considering their experience, expertise and annual turnover.

(B) Duties and Responsibilities of Builders

- (1) He/She shall appoint a qualified Architect/ Engineer/ Town Planner to prepare plans, designs, drawings and specifications for execution of the works in accordance with the requirements of these Regulations.
- (2) He shall not cause or allow any deviations from the approved drawings in the course of the execution of the project and shall bear responsibility for any irregularity committed in the use and function of the building or its parts for which the approval has been obtained.
- (3) He shall not commence the use of building or shall not give the possession to occupy the building to any one before obtaining the occupancy certificate from the Authority.
- (4) He shall provide adequate safety measures for structural stability and protection against fire hazards likely from installation of services like electrical installation, plumbing, drainage, sanitation, water supply, etc. wherever required under the Regulations.
- (5) He shall explain the construction/design and its intended use as per approved plan, to the prospective purchaser of the premises under construction.

(C) REGISTRATION

- (i) The builders shall have to be registered with the Authority on payment of such fees as decided by the Authority from time to time.
- (ii) The Authority may debar or black-list the builder as referred to in the Regulations.

SCHEDULE – 2

ANNEXURE-I

EXTRACT FROM O.D.A. ACT, 1982

Definitions:

- I. "Agriculture" includes horticulture, poultry farming, the raising of crops, fruits, vegetables, flowers, grass or trees of any kind breeding of live-stock including cattle, horses, donkeys, mules, pigs, breeding of fish and keeping of bees and the use of land or grazing cattle or for and purpose which is ancillary to the farming of land or for any other agricultural purpose, but does not include the use of land as a garden which is an appendage to a building and the expression "agriculture" shall be construed accordingly;
- II. "Amenity" includes roads, water and electric supply, open spaces, parks, recreational grounds, cultural centres, natural features, playground, street lighting, drainage, sewerage, city beautification and such other utilities, services and conveniences as the State Government may determine to be an amenity, from time to time, for the purpose of this Act.
- III. "Area of bad lay-out or obsolete development" means an area consisting of land which is badly laid out or of obsolete development not conforming to the planning or the building Regulations framed under this Act together with land contiguous or adjacent thereto and defined as such in the development plan;
- IV. "Authority" means a Development Authority constituted under sub-section (3) of Section 3 for a development area under this Act;
- V. "Building" includes any structure or erection or part of a structure or erection which is intended to be used for residential, commercial, industrial, or other purposes, whether in actual use or not;
- VI. "Building operations" includes rebuilding operations, structural alterations of or additions to buildings and other operations normally undertaken in connection with the construction of buildings;
- VII. "Chairman" means the Chairman of the Authority;
- VIII. "Commerce" means the carrying on of any trade, business or profession, sale or exchange of goods of any type whatsoever and includes the running of with a view to making profit, hospitals, nursing homes, infirmaries or educational institutions, and also includes the running of sarais, hotels, restaurants and of boarding houses not attached to any educational institution and the word "commerce" shall be construed accordingly;
- IX. "Commercial use" includes the use of any land or building or any part thereof for purpose of commerce or for storage of goods, or as an office, whether attached to any industry or otherwise;
- X. "Development" with its grammatical variations means the carrying out or building, engineering, mining or other operations in, on, over or under land or the making of any material change, in any building or

land or in the use of any building or land, and includes redevelopments and reconstructions and lay-out and subdivision of any land and “to develop” shall be construed accordingly;

- XI. “Development area” means the area or group of areas declared as development area under sub-section(1) of Section 3;
- XII. “Director” means the person appointed as Director of Town Planning, Orissa under sub-section(1) of Section 3 of Orissa Town Planning and Improvement Trust Act, (Orissa Act 10 of 1957);
- XIII. “Engineering operation” includes the formation or laying out of a street or means of access to a road or the laying out of means of water-supply, drainage, electricity, gas or of; other public utility service;
- XIV. “Existing land-use” means the predominant purpose for which any land or building was being used on a specified date;
- XV. “Final plot” means a plot reconstituted from an original plot and allotted in a town planning scheme as a final plot;
- XVI. “highway” has the same meaning as in Section 4 of the National Highways Act, 1956 (Act 48 of 1956);
- XVII. “Industry” includes the carrying on of any manufacturing process as defined in the Factories Act, 1948 (Act 63 of 1948) and the word “industrial” shall be construed accordingly;
- XVIII. “Industrial use” means the use of any land or building or part thereof for purpose of industry;
- XIX. “Land” includes benefit to arise out of land and things attached to the earth or permanently fastened to anything attached to the earth;
- XX. “Local Newspaper” means any newspaper printed and published within the State of Orissa;
- XXI. “Means of access” includes any means of passage whether private or public for vehicles or for pedestrians and includes any street;
- XXII. “National Highway” means any highway declared to be a national highway under Section 2 of the National Highways Act, 1956 (Act 48 of 1956);
- XXIII. “Notification” means a notification published in the Gazette;
- XXIV. “Occupier” includes—
 - (a) a tenant,
 - (b) an owner in occupation of, or otherwise using his land,
 - (c) a rent-free tenant of any land,
 - (d) a licensee in occupation of any land, and
 - (e) any person who is liable to the owner for consideration including damages for the use and occupation of the land;
- XXV. “Operational construction” means any construction whether temporary or permanent, which is necessary for the operation, maintenance development or execution of any of the following services, namely :—
 - (a) railways,
 - (b) national highways,
 - (c) national waterways,
 - (d) airways and aerodromes,
 - (e) posts and telegraphs, telephones, broadcasting and other like forms of communications,
 - (f) regional grid for electricity,

- (g) any other service which the State Government may, if it is of opinion that the operation, maintenance, development or execution of such service is essential to the life of the community, by notification declare to be a service for the purpose of this clause;

Explanation—For the removal of doubts, it is hereby declared that the construction of—

- (i) new residential buildings (other than gate, lodges, quarters, for limited essential operational staff and the like), roads and drains in railway colonies, hotels, clubs, institutes and schools, in the case of railways, and
- (ii) a new building, new structure or new installation, or any extension thereof, in the case of any other service, shall not be deemed to be operational construction within the meaning of this clause;

XXVI. “Owner” includes a mortgagee in possession, a person who for the time being, is receiving or is entitled to receive or has received, the rent or premium or any other consideration for any land whether on his own account or on account of, or on behalf of or for the benefit of any other person or who would so receive the rent or premium or any other consideration or be entitled to receive the rent or premium or any other consideration if the land were let out to a tenant and includes the Head of a Government Department, General Manager of a Railway, the Secretary or other Principal Officer of a local authority, statutory authority or company in respect of properties under their respective controls;

XXVII. “Private street” means any street, road, square, court, alley, passage or riding path, which is not a public street but does not include a pathway made by the owner or premises on his own land to secure access to or for the convenient use of such premises;

XXVIII. “Public building” means any building to which the public or any class or section of the public are granted access or any building, which is open to the public or any class or section of the public and includes any building

(a) Used as a—

- (i) school or college or a University or other educational institutions;
- (ii) hostel,
- (iii) library,
- (iv) hospital, nursing home, dispensary, clinic, maternity centre or any other like institution,
- (v) club,
- (vi) lodging house,
- (vii) court,
- (viii) coffee house, boarding house, hotel or eating house,

(b) Ordinarily used by the—

- (i) Central or any State Government or any local authority or anybody, corporate, owned or controlled by the Central or any State Government, or
- (ii) Public or any class or section of the public for religious worship or for religious congregation;

XXIX. “Public open space” means any land, whether enclosed or not, belonging to the Central or any State Government or any local authority or anybody corporate owned or controlled by the Central or any State Government on which there is no building or of which not more than one twentieth part is covered with buildings and the whole or remainder of which is used for purpose of recreation or as open space;

XXX. “Public place” means any place or building which is open to the use and enjoyment of public whether it is actually used or enjoyed by the public or not, and whether the entry is regulated by any entry fee or not ;

XXXI. “Public street” means any street, road, square, court, alley, passage or riding path over which the public have a right to way, whether a thoroughfare or not, and includes—

- (a) the roadway over any public bridge or causeway,
- (b) the footway attached to any such street, public bridge or causeway, and
- (c) the drains attached to any such street , public bridge or causeway and the land, whether covered or not by any pavement, verandah or other structure, which lies on either side of the roadway up to the boundaries of the adjacent property whether that property is private property or property belonging to the Central or any State Government;

XXXII. “Railway” means a railway defined in the Indian Railway Act, 1890 (Act 9 of 1890);

XXXIII. “Reconstituted plot” means a plot which is in any way altered by the making of a town planning scheme;

Explanation—For the purposes of this clause “altered” includes the alteration of ownership of plot.

XXXIV. “Regulation” means a Regulation made under section 124 and includes zoning and other regulations made as a part of a development plan;

XXXV. “Residence” means includes the use for human habitation of any land or building or part thereof including gardens, grounds, garage, stables and outhouses, if any, appurtenant to such building and ‘residential’ shall be construed accordingly;

XXXVI. “Rule” means a rule made under this Act by the State Government;

XXXVII. “Slum area” means any predominantly residential area, where the dwellings which, by reasons of dilapidation, overcrowding, faulty arrangements or design, lack of ventilation, light or sanitary facilities or any combination of these factors, are detrimental to safety and health of the inhabitants or others and which is defined by development plan as a slum area;

XXXVIII. “To correct” in relation to any building includes—

- (a) any material alteration or enlargement of any building,
- (b) the conversion by structural alteration of place for human habitation of any building not originally constructed for human habitation,
- (c) the conversion into more than one place for human habitation of a building originally constructed as one such place,
- (d) the conversion of two or more places of human habitation into a greater number of such places,
- (e) such alterations of a building as affects an alteration of its drainage or sanitary arrangement or materially affects its security,
- (f) the addition or any rooms, buildings, houses or other structures to any building, and
- (g) the construction in a wall adjoining any street or land not belonging to the owner of the wall, or a door opening on to such street or land;

XXXIX. “Tribunal” means the Tribunal constituted under Section 87;

XL. “Unauthorized occupation” in relation to any premises means the occupation by any person of the premises belonging to the Authority , without any authority, for such occupation and includes the continuance of this occupation by any person of the premises after the Authority (whether by way of grant or any other mode of transfer under which he was allowed to occupy the premises) has expired or has been determined for any reasons whatsoever;

XLI. “Urban local body” means a Municipal Council or a Notified Area Council constituted under the Orissa Municipal Act, 1950 (Orissa Act 23 of 1950);

XLII. “Valuation Officer” means the Valuation Officer appointed under section 33 of this Act;

XLIII. “Zone” means any one of the Divisions into which a development area may be divided for the purpose of development under this Act;

XLIV. Words and expressions used in this Act but not defined shall have the same meaning as assigned to them in the Orissa Municipal Act, 1950 (Orissa Act 23 of 1950) as amended from time to time.

*ANNEXURE-II***EXTRACT FROM O.D.A. RULES, 1983****(1) Definitions:**

- (i) "Act" means the Orissa Development Authorities Act, 1982;
 - (ii) "Architect Member" means Urban Designer or Architect-member appointed under clause (f) of sub-section (5) of Section 3;
 - (iii) "Board" means the Board of Enquiry appointed under Rule 13;
 - (iv) "Engineer Member" means the Engineer Member appointed under clause (c) of sub-section (5) of Section 3;
 - (v) "Finance Member" means the Finance and Accounts member appointed under clause (d) of sub-section(5) of section 3;
 - (vi) "Form" means a Form appended to these rules;
 - (vii) "Gazette" means the Official Gazette of the State of Orissa;
 - (viii) "Member" means a member of the Authority;
 - (ix) "Planning Member" means the Town and Regional Planning Member appointed under clause (e) of sub-section (5) of Section 3;
 - (x) "Registered Contractor" means a contractor registered under Rule 67;
 - (xi) "Section" means a Section of the Act.
- (2) Words and expressions used, but not defined in these rules shall have the same meaning as respectively assigned to them in the Act.

*ANNEXURE-III***EXTRACT FROM NATIONAL BUILDING CODE OF
INDIA, 2005****1. Definitions**

Accessory use—Any use of the premises subordinate to the principal use and customarily incidental to the principal use.

Alteration—A change from one type of occupancy to another, or a structural change, such as an addition to the area or height, or the removal of part of a building, or any change to the structure, such as the construction of cutting into or removal of any wall, partition, column, beam, joist, floor or other support, or a change to or closing of any required means of ingress or egress or a change to the fixtures or equipment.

Approved—Approved by the Authority having jurisdiction

Building height of—The vertical distance measured, in the case of flat roofs from the average level of the ground around and contiguous to the building or as decided by the Authority to the terrace of last liveable floor of the building adjacent to the external walls; and in the case of pitched roofs, up to the point where the external surface of the outer wall intersects the finished surface of the sloping roof, and in the case of gables facing the road, the mid-point between the eaves level and the ridge. Architectural features serving no other function except that of decoration shall be excluded for the purpose of measuring heights.

Building line—The line up to which the plinth of a building adjoining a street or an extension of a street or on a future street may lawfully extend. It includes the lines prescribed, if any, in any scheme. The building line may change from time to time as decided by the Authority.

Conversion—The change of occupancy or premises to any occupancy or use requiring additional occupancy permit.

Drain—A conduit or channel for the carriage or storm water, sewerage, waste water or other water-borne wastes in a building drainage system.

Drainage—The removal of any liquid by a system constructed for the purpose.

Occupancy or use group - The principal occupancy for which a building or a part of a building is used or intended to be used; for the purpose of classification of a building according to occupancy, an occupancy shall be deemed to include the subsidiary occupancies which are contingent upon it.

Occupier—Occupier includes any person for the time being, paying or liable to pay rent or any portion of rent of the building in respect of which it is used, or compensation or premium on account of the occupation of such building and also a rent free tenant, but does not include a lodger, and the words 'occupy' and 'occupation' do not refer to the lodger. An owner living in or otherwise using his own building shall be deemed to be the occupier thereof.

Operational construction/Installation—A construction/installation put up by Government Departments for operational purposes.

Owner—Person or body having a legal interest in land and/or building thereon. This includes free holders, leaseholders or those holding a sub-lease which both

bestows a legal right to occupation and gives rise to liabilities in respect of safety or building condition.

In case of lease or sub-lease holders, as far as ownership with respect to the structure is concerned, the structure of a flat or structure on a plot belongs to the allottee/lessee till the allotment/lease subsists.

Permit—A permission or authorization in writing by the Authority to carry out work regulated by the Code.

Registered Architect, Engineer, Structural Engineer, Supervisor, Town Planner, Landscape Architect, Urban Designer—Qualified architect, engineer, structural engineer, supervisor, town planner, landscape architect or urban designer who has been registered by the Authority or by the body governing such profession and constituted under a statute, as may be applicable. The registration requirements of these professionals shall be as given in Annexure-A.

NOTES -

1. Unless specified otherwise, the word 'engineer' shall mean 'civil engineer' or 'Architectural Engineer'.
2. The work 'licensing/licensed etc,' if used by the Authority in the above context shall be deemed to mean 'registration/registered' / empanelment, etc.

2.15 Road—See 2.25

2.16 Road line—See 2.27

2.17 Room Height—The vertical distance measured from the finished floor surface to the finished ceiling surface. Where a finished ceiling is not provided, the underside of the joists or beams or tie beams shall determine the upper point of measurement for determining the head room.

2.18 Sanctioned plan—The set of plans and specifications submitted in connection with a building or development and duly approved and sanctioned by the Authority.

2.19 Service road—A road/lane provided at the rear or side of a plot for service purposes.

2.20 Setback line—A line usually parallel to the plot boundaries and laid down in each case by the Authority, beyond which nothing can be constructed towards the site boundaries.

2.21 Site (plot)—A parcel (piece) of land enclosed by definite boundaries

2.22 Street level or grade—The officially established elevation or grade of the centre line of the street upon which a plot fronts and if there is no officially established grade, the existing grade of the street at its mid-point

2.23 Street line—The line defining the side limits of a street

2.24 Unsafe—Building—Buildings which are structurally and constructionally unsafe or insanitary or not provided with adequate means of egress or which constitute a fire hazard or are otherwise dangerous to human life or which in relation to existing use constitute a hazard to safety or health or public welfare, by reason of inadequate maintenance, dilapidation or abandonment.

2. Regulations for ventilation shaft.

For ventilating the spaces for water closets and bath rooms if not opening on to front, side, rear and interior open spaces, these shall open on the ventilation shaft, the size of which shall not be less than the values given below :

Height of buildings in Meter	Size of ventilation shaft in Square Meter	Minimum dimension of one side of the shaft in Meter
Up to 10	1.2	0.9
Up to 12	2.8	1.2
Up to 18	4.0	1.5
Up to 24	5.4	1.8
Up to 30	8.0	2.4
Above 30	9.0	3.0

3. Classification of Buildings based on occupancy

(a) Residential Buildings

These shall include any building, in which sleeping accommodation is provided for normal residential purposes with or without cooking or dining or both facilities, including one or two or multi-family dwellings, lodging dormitories, apartment houses, flats and hostels.

(b) Institutional Buildings

These shall include any building or part thereof which is used for purposes such as medical or other treatment or care of persons suffering from physical or mental illness, disease, infirmity, care of infants, convalescents or aged persons and for penal or correctional detention in which the liberty of the inmates is restricted and special training centers. Institutional buildings ordinarily provide sleeping accommodation for the occupants and specialized non-commercial training centers. It includes hospitals, sanatoria, custodial institutions and penal institutions like jails, prisons, mental hospitals and reformatories. These shall include any building used for school, college or day care purposes involving assembly for instruction education or recreation where it is a part of education.

(c) Assembly Buildings

These shall include any building or part of a building where groups of people not less than 50 congregate or gather for amusement, recreation, special, patriotic, civil travel and similar purposes, for example—theatres, motion picture houses, assembly halls, auditoria, libraries, exhibition halls, museums, skating rinks, gymnasium, restaurants, dance halls, club rooms, passenger stations, and terminals of air, surface and other public transportation services, recreation piers and stadia. These shall include any building used for religious purposes like prayers, puja, worship, religious or spiritual congregation, discourses, rituals and functions.

(d) Commercial Buildings

These shall include any building or part of a building which is used as shop, stores, market for display and sale of merchandise either wholesale or retail, office storage or service facilities incidental to the sale of merchandise and located in the same building. These shall include any building or part of a building which is used for transaction of business for the keeping of accounts and records for similar purposes by any Government or local authority or a body corporate, or a company or a person or group of persons. This also includes professional establishments, town halls, court houses, libraries, laboratories, research establishment, computer installation, telephone exchanges, broadcasting stations, TV stations, IT and ITES related activities.

(e) Industrial Building

These shall include any building or part of a building or structure, in which products or materials of all kinds and properties are fabricated, assembled or processed like assembly plants, laboratories, power plants, smoke houses, refineries, gas plants, mills, dairies, factories, dry cleaning plants, generating units, pumping stations, saw mills, etc.

(f) Storage Buildings

These shall include any building or part of building used primarily for the storage or sheltering (including servicing, processing or repairs incidental to storage) of goods, wires, merchandise, like warehouses, cold storages, freight depots, transit sheds, store houses, garages, hangers, truck terminals, grain elevators, barns and stables.

(g) Hazardous Buildings

These shall include any building or part of a building which is used for the storage, handling, manufacture or processing of highly combustible or explosive materials or products which are liable to burn with extreme rapidity and may produce poisonous fumes or explosions for storage, handling, manufacturing or processing which involve highly corrosive toxic or noxious alkalis, acids or other liquids or chemicals producing flame, fumes and explosive poisonous, irritant or corrosive gases, and for the storage, handling or processing of any material producing explosive, mixtures or dust which result in the Division of matter into fine particles subject to spontaneous ignition.

4. Regulations for Life Safety

Every building shall be so constructed, equipped, maintained and operated as to avoid undue danger to the life and safety of the occupants from fire, smoke, fumes or panic during the time period necessary for escape.

For general exit requirements, occupant load, capacities of exits, arrangements of exits, number of exits, doorways, corridors and passage ways, internal stair-case, external stair-case, horizontal exits, fire towers, ramps, fire lifts, emergency and escape lighting,

illumination of means of exit and fire detection and warning, the relevant provisions in clause-4, part-4 or NBC, 2005 shall be referred.

5. Requirements of parts of Building

Every parts of the building and other building related activities shall be planned and designed in accordance with the clause 12, part-3 of NBC, 2005.

6. Fire Safety Requirements

Building shall be so planned, designed and constructed so as to ensure fire safety and this shall be done in accordance with the part-4, Fire and Life Safety of the National Building Code of India, 2005.

7. Structural Design

The structural design of any item of masonry, timber, plain and reinforced concrete and steel in a building shall be carried out in accordance with part-6, Structural Design of NBC.

8. Quality of Material and Workmanship

All materials and workmanship shall be of good quality conforming generally to accepted standards of Public Works Department of Orissa, BIS Specifications and Codes as included in part-5 Building Materials and Part-7 Constructional Practices and Safety of National Building Code of India, 2005.

9. Building Services

The Planning design and installation of electrical installations, air-conditioning and heating work, installation of lifts and escalators in a building shall be carried out in accordance with part-8 (Building Services) of National Building Code of India, 2005.

10. Water supply requirements

The requirements of water supply in a building shall be accordance with the provision of National Building Code, 2005 as amended from time to time.

11. Structural Safety for Natural Hazard Protection

For building more than three storeyed (including ground floor) or more than 12.0 meter height and important facilities like water works, overhead tank, telephone exchange, bridges and culverts, electric sub-station, transmission towers, the requirements specified in the BIS Code and guidelines and other documents shall be observed for structural safety and natural hazards protection of buildings.

12. Civic Amenities

In group housing, residential lay-outs and Integrated Townships, the civic amenities shall be provided as specified in clause 5.5., part-3 of National Building Code of India, 2005.

13. Provisions for Physically Handicapped

Provisions for physically handicapped persons shall be made in all buildings and facilities used by public in accordance with the provision of part-3 of National Building Code of India, 2005.

SCHEDULE 3**FORM I
PART I****BUILDING PLAN APPLICATION FORM**

Form No. _____

Authorised Signature

**APPLICATION FOR PERMISSION FOR DEVELOPMENT OF BUILDING AND
SUBDIVISION OF LAND UNDER SECTION 16 OF THE ORISSA
DEVELOPMENT AUTHORITIES ACT, 1982**

From:
Name and Address
(in Block letters)
Tel. No. _____

For Office use only
Regd. No.
Scrutiny Fee

To

THE VICE-CHAIRMAN,
BHUBANESWAR DEVELOPMENT AUTHORITY
BHUBANESWAR.

Madam/Sir,

I/We hereby apply for permission to undertake development and carry out—

- (a) construction of _____ storeyed building;
- (b) re-construction of an existing building;
- (c) alteration/addition to the existing building;
- (d) revalidation/renewal of plan for construction of all _____ storeyed building;
- (e) subdivision of land;
- (f) _____ (if any other please specify)

In respect of Plot No. _____, Khata No. _____, Village _____ of _____ Municipal Corporation/Municipality/N.A.C. within the Development Plan Area of Bhubaneswar. The said land building shall be used for _____ purpose.

I/We enclosed herewith the following plans (4 copies in case of privately owned plots/ 8 copies in case of Govt. leased Govt. plots) and specifications duly signed by me and Architect/ Engineer/ Supervisor/ Group agency _____ bearing Regd.No. _____,

Licence/Empanelment No._____ who has/have prepared the plans, designs, etc. and who will supervise the developments.

I/We the owner(s) of every part of the land/building to which this application relates, requests, permission for the above development may kindly be accorded.

Place:

Signature of Owner(s)

Date :

Name of Owner(s)

FORM I**PART II****FORM FOR SUPERVISION**

I hereby certify that the development/erection/re-erection/demolition or material alteration in/of the building in respect of Plot No._____, Khata No._____, Village/Mouza_____of_____Municipal Corporation/Municipality/N.A.C. shall be carried out under my supervision and I certify that all the materials (type and grade) and the workmanship of the work shall be generally in accordance with the general and detailed specifications submitted along with and that the work shall be carried out according to the sanctioned plans.

Signature of Empanelled

Technical Person

Name of the Technical Person

Address _____

Date _____

FORM NO. II
BHUBANESWAR DEVELOPMENT AUTHORITY

No. _____/BDA., Bhubaneswar, Dated _____

Permission under sub-section (3) of Section 16 of the Orissa Development Authorities Act, 1982 (Orissa Act, 1982) is hereby granted in favour of :

Smt./ Shri _____ for—

- (a) subdivision of lands;
- (b) institution of change of the use of land or building;
- (c) construction of a _____ building;
- (d) reconstruction of building;
- (e) Alteration of ;
- (f) Alteration or additions in the existing building

_____ (Specify) in respect of Plot No. _____, Khata No. _____ Village/Mouza. _____ of _____ Municipal Corporation/Municipality/N.A.C. within the Development Plan Area of _____ subject to following additions/ restrictions :

- (a) The Land/Building shall be used exclusively for _____ purpose and the usage shall not be changed to any other use without prior approval of this Authority.
- (b) The development shall be undertaken strictly according to plans enclosed with necessary permission endorsement
- (c) Parking space measuring _____ Sq. m. as shown in the approved plan shall be kept open and no part of it will be built upon.
- (d) The land over which construction is proposed is accessible by an approved means of access of _____ m. width.
- (e) The land in question must be in lawful ownership and peaceful possession of the applicant.
- (f) The applicant shall free gift _____ m. wide strip of land in the _____ Municipal Corporation/Municipality/N.A.C. for the further widening of the road to the standard width.
- (g) The permission is valid for a period of three years with effect from the date of issue.
- (h) Permission accorded under the provision of Section 16 of O.D.A. Act, cannot be construed as evidence in respect of right, title, interest of the plot over which the plan is approved.
- (i) Any dispute arising out of land record or in respect of right/ title/ interest after this approval, the plan shall be treated automatically cancelled during the period of dispute.

(j) Any other conditions.

By Order

Authorised Officer

Bhubaneswar Development Authority

Memo No._____/BDA., Bhubaneswar Dated_____

Copy along with _____ copies of the approved plans to
Smt./ Shri_____.

Authorised Officer

Bhubaneswar Development Authority

Memo No._____/BDA., Bhubaneswar Dated_____

Copy with a copy approved plan forwarded to the Executive Officer, Bhubaneswar Municipal Corporation/ Executive Officer, Khurda Municipality/ Executive Officer, Jatni Municipality for information.

Authorised Officer

Bhubaneswar Development Authority

Memo No._____/ BDA., Bhubaneswar Dated_____

Copy forwarded to the Land Officer, G. A. Department/ Director of Town Planning, Orissa, Bhubaneswar/ Enforcement Section, B.D.A., Bhubaneswar.

Authorised Officer

Bhubaneswar Development Authority

FORM III**APPLICATION FOR DRAWING OF ATTENTION UNDER SUB-SECTION (7)
OF SECTION 16 OF THE ORISSA DEVELOPMENT AUTHORITIES
ACT,1982**

From_____

(Name and address of the applicant in block letters)

TO

THE VICE-CHAIRMAN,
BHUBANESWAR DEVELOPMENT AUTHORITY
BHUBANESWAR

SUBJECT—Statutory Notice under sub-section (7) of Section 16 of the O.D.A.
Act,1982.

Madam/ Sir,

I/We do bring to your kind notice that I/We had applied for permission to the Bhubaneswar Development Authority on_____ to undertake development with respect to Plot No._____ Khata No._____, Village/ Mouza_____ of_____Municipal Corporation/Municipality/ NAC within Development Plan Area of_____. My/ our application was registered vide No._____, dated_____. Two months have elapsed since the submission of my/our application and I/we have not received any communication with respect to the said application.

Please take notice that if within a further period of one month from the date of receipt of this notice by you no communication either granting or refusing permission is received by me/ us, I/ we shall presume that permission as applied for has been granted in my/ our favour.

Yours faithfully

Signature of the applicant(s)

[illegible]

FORM V**FORM OF NOTICE FOR COMMENCEMENT OF WORK**

**[TO BE FURNISHED BY THE PLOT OWNER(S) AND THE BUILDER/
DEVELOPER]**

From_____

(Name and address in Block Letters)

To

THE VICE-CHAIRMAN,
BHUBANESWAR DEVELOPMENT AUTHORITY
BHUBANESWAR.

Sir,

I/We hereby give notice of the erection of building in respect of Plot No._____, Khata No._____, Village_____ to be commenced on_____ as per the permission given in your letter No. _____, dated _____ under the supervision of B.D.A. empanelled Architect/Engineer/ Structural Engineer_____,Regd.No_____ in accordance with the approved plan.

Yours faithfully

Signature(s) of the Owner

Signature of Builder / Developer

FORM VI**PART - I****COMPLETION CERTIFICATE**

From _____

(Name and address in Block Letters)

To

THE VICE-CHAIRMAN,
BHUBANESWAR DEVELOPMENT AUTHORITY
BHUBANESWAR.

Sir,

I hereby certify that the development of erection, re-erection or for material alteration in respect of the building on Plot No._____, Khata No._____, Village/Mouza_____ of _____ Municipal Corporation/Municipality/N.A.C. within the Development Area of _____ has been supervised by me and has been completed on _____ according to the plans sanctioned vide No._____, dated _____. The work has been completed to my best satisfaction, the workmanship and all the materials (type and grade) have been used strictly in accordance with the general and detailed specifications. No provisions of the code, conditions prescribed or orders issued thereunder have been transgressed in the course of the work. The land is fit for construction for which it has been developed or redeveloped or the building is fit for use for which it has been erected, re-erected or altered, constructed and enlarged.

I hereby also enclose the plan of the building completed in all aspects.

Signature of
Empanelled Technical Person

Name of the Technical Person

Address _____

Date _____

FORM VI
PART - II

**CERTIFICATE FOR EXECUTION OF WORK AS PER STRUCTURAL
SAFETY REQUIREMENTS**

With respect to the building work of erection, re-erection or for making alteration in the building on Plot No._____, Khata No._____, Village/Mouza_____ of _____Municipal Corporation/ Municipality/N.A.C. within the Development Plan Area of_____, I certify—

- (a) that the building has been constructed according to the sanctioned plan and structural design(copy of the drawings as executed enclosed),which incorporates the provisions of structural safety norms as specified in Part- 6 (Structural Design) of the National Building Code of India, 2005 and other relevant codes; and
- (b) that the construction has been done under my supervision and guidance and adheres to the drawings and specifications submitted and records of supervision have been maintained.

Any subsequent changes from the completion drawings shall be the responsibility of the owner.

Signature of owner
with date

Signature of the Empanelled Engineer/
Structural Engineer with date and
Empanelment No.

Name _____

Address _____

FORM VII**CERTIFICATE FOR STRUCTURAL STABILITY**

With respect to the building work of erection, re-erection or for making alteration in the building on Plot No._____, Khata No._____, Village/Mouza_____ of _____Municipal Corporation/ Municipality/N.A.C. within the Development Plan Area of_____, I certify that the structural plans and details of the building submitted for approval satisfy the structural safety requirements for all situations including natural disasters like cyclone and earthquake etc., as applicable, as stipulated under Part- 6 (Structural Design) of the National Building Code of India, 2005 and other relevant codes; and the information given therein is factually correct to the best of my knowledge. I undertake responsibility with regard to supervision of the work at each stage of construction (after laying of foundation and after casting of each floor) and submit the report to B.D.A. regularly to effect that the building is being constructed conforming to the approved plan and as per the structural plan prepared by me. I will be responsible and liable for action by B.D.A./Govt. if the plan/design contain misrepresentation or fraudulent information and the construction is made in deviation of approved plan or if there is any structural failure due to wrong /unsafe structural design ,use of low quality material and/or poor workmanship endangering the in-mates/public.

Signature of owner
with date

Signature of the Registered
Engineer/ Structural Engineer
with date and Registration No.

Name _____

Address _____

FORM VIII
PERIODIC PROGRESS REPORT

(To be submitted by the Empanelled Structural Engineer/ Architect/
 Engineer)

From

To

THE PLANNING MEMBER,
 BHUBANESWAR DEVELOPMENT AUTHORITY,
 BHUBANESWAR.

Ref.— B.D.A. approval Letter No._____, Dated _____

Madam/ Sir,

I/We hereby certify that the construction of the building up to foundation, plinth/ground floor/floors of the building Plot No._____, Village/Mouza _____ has been supervised by me/us and has been constructed strictly conforming to the sanctioned plan and structural design as per the provision of N.B.C., 2005. The work has been done to my/our best satisfaction. All the materials used in construction of this building are strictly in accordance with B.I.S./I.S.I. specifications and norms conforming to National Building Code, 2005 covering all the safety factors including earthquake and cyclone. I/we will be responsible and liable for action by B.D.A./Govt. if there is any structural failure and fire endangering the inmates and public.

Yours faithfully

Signature of the
 Architect/Engineer

Name

Empanelment No.

Yours faithfully

Signature of the
 Architect/Engineer

Name

Empanelment No.

FORM IX
BHUBANESWAR DEVELOPMENT AUTHORITY

No. _____ / BDA, Bhubaneswar, Dated the _____

**REFUSAL OF PERMISSION UNDER SUB-SECTION (3) OF SECTION 16 OF
 ORISSA DEVELOPMENT AUTHORITIES ACT 1982 FOR UNDERTAKING
 DEVELOPMENT OF PLOT NO. _____ IN MOUZA _____**

To

SMT./SHRI _____

Your reply to this office letter No. _____, Dt. _____ has not been found satisfactory / You have failed to show any cause in response to this office letter No. _____, dated _____

Hence, in exercise of the powers under sub-section (3) of Section 16 of the Orissa Development Authority Act, 1982, permission to undertake development on Plot No. _____, Mouza _____ of Bhubaneswar/ Khurda/Jatni Development Plan Area is hereby refused on the following grounds :

1. _____
2. _____
3. _____
4. _____

Two copies of the plans are retained in this office for record and reference and the rest are returned herewith.

By Order

Authorised Officer

Memo No. _____/ BDA, Bhubaneswar, Dated. _____

Copy to Municipal Commissioner, B.M.C./Director of Estates, G.A. Deptt. (in case of lease plots).

Authorised Officer

FORM X**OCCUPANCY CERTIFICATE**

The work of erection, re-erection or for material alteration undertaken in respect of Plot No. _____, Village/Mouza _____ is completed under the supervision of _____ Architect (Empanelment No. _____) _____/Structural Engineer (Empanelment No. _____) Supervisor _____ (Empanelment No. _____) as per the Completion Certificate submitted. On inspection, it is observed that the erection, re-erection or alteration undertaken with respect to above plot(s) conform/ do not conform the approved plan and the conditions imposed vide letter No. _____, dt. _____. The building is permitted/ not permitted for occupation for _____ occupancy subjected to the following

- 1.
- 2.
- 3.

One set of completion plans duly certified is returned herewith.

By Order

Authorised Officer

Bhubaneswar Development Authority